

حمل الآن

مجانا وحصريا

امتحانات رقم (1)

الترم الثاني



1

Cairo Governorate

West Nasr City Educational
Mathematics Inspector's-Model (B)

1. Choose the correct answer :

- A class contains 50 students if 20 % of them prefer swimming , then their number = _____
A. 40 B. 12 C. 10 D. 8
- The distance between the two points $(2, -5)$ and $(7, -5)$ _____ units.
A. 5 B. 7 C. 9 D. 10
- The point $(-5, -5)$ lies in the _____ quadrant.
A. first B. second C. third D. fourth
- Which of the following represents a conversion factor _____
A. 24 H : day B. 20 cm : 2 m C. 1 kg : 100 gm D. 1 sec : 60 min
- Soad read 35 pages in 5 days , then the rate of her reading = _____ pages/day.
A. 10 B. 8 C. 5 D. 7
- The number of heights of the acute-angled triangle = _____
A. 1 B. 2 C. 3 D. 4
- The reciprocal of $\frac{4}{5}$ is _____
A. $\frac{5}{9}$ B. $\frac{6}{5}$ C. $\frac{5}{4}$ D. $\frac{5}{6}$
- The ratio whose first term is 2 and the second term is 3 written as _____
A. 3 : 2 B. 5 : 6 C. 6 : 5 D. 2 : 3
- If $6 : 10 = 3 : N$, then $N =$ _____
A. 5 B. 10 C. 12 D. 7

2. Solve each of the following :

- A robe of 8 m long. It's wanted to be divided into equal parts of $\frac{1}{2}$ m each.
Calculate the number of pieces.
The number of pieces = _____
- A class consists of 20 boys and 25 girls. Find the ratio between the number of boys and the number of girls.
The ratio = _____
- A cuboid of dimensions 10 cm , 5 cm , and 4 cm. Calculate its volume.
The volume = _____

4. A fridge of price 20,000 L.E. and the discount is 10% , find the discount and the selling price after discount.

The discount = _____

The price after discount = _____

5. A triangle its base length is 6 cm , and the corresponding height is 7 cm.
Calculate its area.

The area = _____

6. Omar covered 40 km in 4 hours. Find the distance which he covered in 5 hours.

The distance = _____

7. If the area of a parallelogram is 30 cm^2 and one of its bases is 6 cm.

Calculate the corresponding height.

The height = _____

2

Cairo Governorate



Mathematics Supervision
Model (A)

1. Choose the correct answer :

1. $\frac{1}{4}$ of 16 = _____

A. 16

B. 4

C. 8

D. 0.4

2. $3 \div \frac{1}{3} =$ _____

A. $\frac{1}{9}$

B. 1

C. 9

D. $3\frac{1}{3}$

3. The _____ is comparing between two quantities of the same type.

A. rate

B. ratio

C. unit rate

D. conversion factor

4. Percentage is a ratio with second term _____

A. 100

B. 10

C. 12

D. 1

5. Ahmed works 48 hours in 6 days, then the number of hours he works in one day is _____ hours.

A. 6

B. 7

C. 8

D. 9

6. The point _____ located in fourth quadrant.

A. (5, 2)

B. (5, -2)

C. (-2, 2)

D. (-2, -5)

7. A rhombus of side length is 10 cm , and height is 7 cm , then its area = _____ cm^2

A. 17

B. 34

C. 70

D. 35

8. Number of heights of obtuse-angled triangle is _____ heights

A. 3

B. 1

C. 2

D. 5

9. The number of edges of a cube = _____ edges.

A. 6

B. 8

C. 12

D. 10

2. Answer the following questions :

1. A parallelogram its base length is 12 cm , its corresponding height is 5 cm. Find its area.

2. A cuboid its length is 8 cm , its width is 5 cm and its height is 10 cm. Find its volume.

3. A triangle its base length is 8 cm , its corresponding height is 6 cm. Find its area.

4. Adam has a tape its length is $\frac{7}{8}$ meter. He divided it into 7 equal parts.
Find the length of each part.

5. Write the reciprocal of $\frac{2}{3}$.

6. The price of a pair of shoes is 700 pounds , it has a discount of 20%. Find the amount of the discount.

7. In coordinate plane : Find the reflection of :

a. The point (3 , - 5) on x-axis.

b. The point (3 , 4) on y-axis.

3

Cairo Governorate



Heliopolis Educational Zone
St. Joseph's School

1. Choose the correct answer :

1. $\frac{1}{2} =$ _____ %

A. 20

B. 25

C. 50

D. 0.5
2 cm

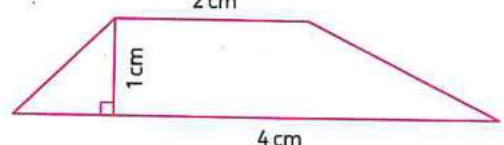
2. The area of the given trapezium = _____ cm^2

A. 2

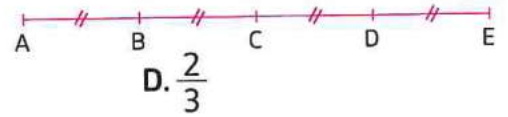
B. 3

C. 4

D. 5



3. If 100% of students of a class were present, then _____ of the students were present.
 A. all B. most C. few D. no one
4. In a triangle, if the base length $\times$ the corresponding height = 8 cm^2 , then the area of the triangle is _____ cm^2 .
 A. 4 B. 8 C. 16 D. 32
5. If $\frac{p}{r} = \frac{s}{t}$, then _____.
 A. $p \times s = r \times t$ B. $p \times t = s \times r$ C. $p \times r = s \times t$ D. $s \times p = t \times r$
6. The point $(-2, -1)$ lies in the _____ quadrant.
 A. first B. second C. third D. fourth
7. The point (a, b) lies on y-axis, then $a + b =$ _____.
 A. 0 B. a C. b D. $a \times b$
8. The ratio between BD and AE is _____.
 A. $\frac{1}{4}$ B. $\frac{1}{2}$ C. $\frac{2}{2}$ D. $\frac{2}{3}$
9. $0.45 \times 3.5 = 4.5 \times$ _____.
 A. 350 B. 35 C. 0.35 D. 0.035



2. Answer the following questions :

1. A worker earns 900 pounds weekly. He spends 60% on food and rent.
 Find the amount of money that he spends ?

2. If 400 pounds are paid for 8 kg of apples

- a. Find the unit rate _____
- b. How much would you pay for 7 kg ? _____

3. Find x in each :

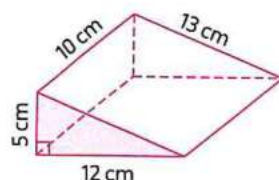
- a. If the ratio 7 : 11 is equivalent to the ratio $x : 77$ _____
- b. If 25% of 1,000 = 50% of x _____

4. a. Complete : 48 kg per day = _____ kg per hour

b. How many $\frac{2}{5}$ s are there in 4 oranges _____

5. Find the area of the parallelogram if the length of the two bases are 8 cm and 6 cm and the smaller height is 3 cm.

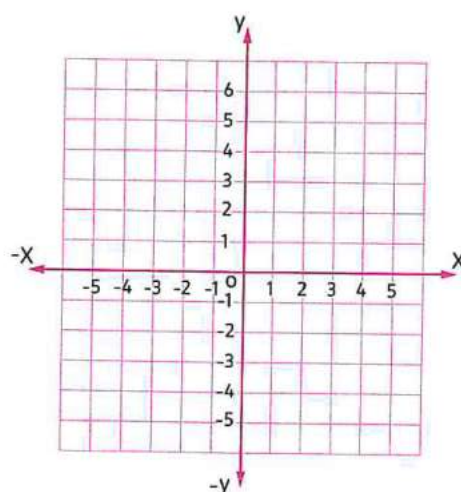
6. Find the surface area of the given triangular prism.



7. On the given coordinate plane :

a. Plot the points A (2 , 4) and B (− 2 , 4)

b. Find the distance between A and B



4

Giza Governorate



Mathematics Inspection
Model (c)

1. Choose the correct answer :

1. _____ is the comparison between two quantities with different units.

- A. Ratio B. Rate C. Percentage D. Reflection

2. If $11 \times 12 = 132$, then $1.1 \times 0.12 =$ _____

- A. 132 B. 1.32 C. 0.132 D. 13.2

3. The simplest form of the ratio 12 : 16 = _____

- A. 2 : 5 B. 5 : 2 C. $\frac{3}{4}$ D. $\frac{4}{3}$

4. The point (1 , − 2) lies in _____ quadrant

- A. 1st B. 2nd C. 3rd D. 4th

5. 40 % + 20% = _____ %

- A. 80 B. 10 C. 40 D. 60

6. 53,000 ml. = _____ litre.

A. 53

B. 530

C. 5,300

D. 5.3

7. The image of the point $(1, -2)$ by reflection in x-axis is _____

A. $(1, 2)$

B. $(-1, -2)$

C. $(2, 1)$

D. $(-1, 2)$

8. $5 \div \frac{1}{2} =$ _____

A. 2

B. 10

C. $\frac{5}{10}$

D. $\frac{2}{10}$

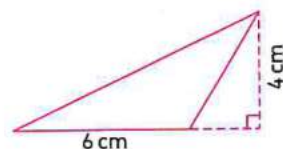
9. The area of the opposite triangle = _____ cm^2

A. 24

B. 12

C. 64

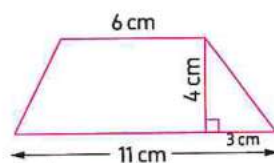
D. 18



2. Answer the following questions :

1. A factory produces 1,500 cans in 3 hours , then production rate = _____ cans/hr.

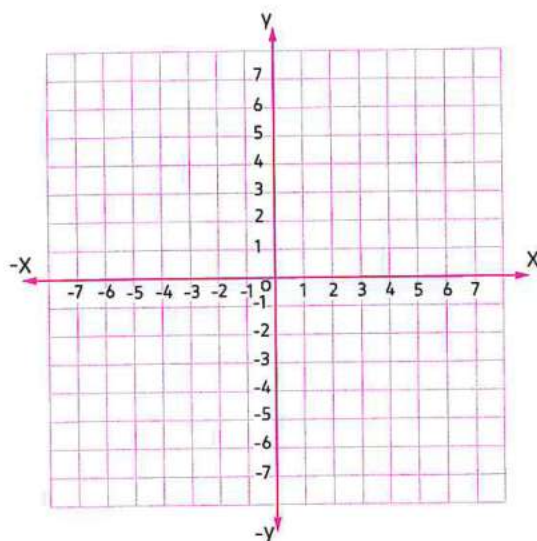
2. The area of the opposite figure is _____ cm^2



3. Plot the following points on the opposite grid :

A $(5, 3)$, B $(1, 3)$, C $(1, -1)$, D $(5, -1)$

Join them ,then identify the shape.

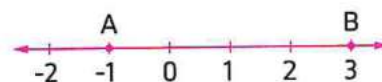


4. A man deposited 10,000 L.E. in a bank with annual interest 10%.

Find the total amount which he gets at the end of one year.

5. In the opposite number line :

The length of $\overline{AB}$ = _____ length units.



6. A cuboid of dimensions 5 cm , 4 cm , and 2 cm. Find its volume.

7. If $x : 4 = 12 : 16$ Find the value of $x + 2$

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Giza Governorate



El-Haram Directorate
The Egyptian International School-Model (A)

1. Choose the correct answer :

1. The reciprocal of 1 is _____

- A. 1 B. 0 C. 2 D. 10

2. If 3 : 8 is equivalent to 9 : x , then $x + 3 =$ _____

- A. 16 B. 24 C. 27 D. 72

3. $15\% + 45\% =$ _____

- A. 50 % B. 0.6 C. 0.060 D. 6 %

4. Which of the following is not a conversion factor ?

- A. $\frac{1 \text{ km}}{1,000 \text{ m}}$ B. $\frac{100 \text{ cm}}{1 \text{ m}}$ C. $\frac{1 \text{ hr}}{60 \text{ sec}}$ D. $\frac{1 \text{ day}}{24 \text{ hr}}$

5. 15 % of a litre = _____ mL

- A. 150 B. 1.5 C. 1,500 D. 0.015

6. The image of $(-1, 3)$ by reflection in the y - axis is the point _____

- A. (1, 3) B. $(-1, -3)$ C. $(-1, 3)$ D. $(1, -3)$

7. Which of the following lies in the second quadrant ?

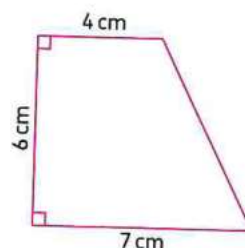
- A. (2, 3) B. $(-4, 5)$ C. $(-2, -4)$ D. $(6, -3)$

8. A parallelogram with area 56 m^2 and base length 7 m , then the corresponding height is _____ m

- A. 8 B. 9 C. 7 D. 6

9. Area of the opposite trapezium is _____ cm^2

- A. 42
B. 66
C. 24
D. 33



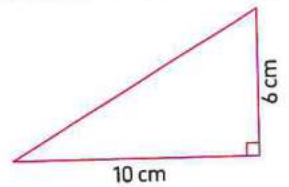
2. Answer the following questions :

1. a. The price of a t-shirt is 240 L.E. if the discount is 10 %
What is its price after discount ?

b. How many $\frac{3}{5}$ in 6 ? _____

2. a. If the ratio between two numbers is 1 : 5 and the sum of them is 30 , find the two numbers.

b. The area of the triangle = _____ cm^2

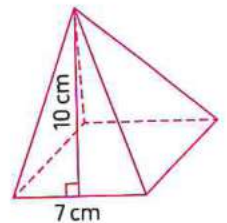


3. Amir bought 3 kg of apples for 45 L.E. , then the price of 2 kg is _____

4. a. Find the distance between the two points (3 , 5) , (3 , - 6).

The distance is _____

- b. Find the surface area of the opposite pyramid.



5. If the percentage of boys in a school is 80 % , then the percentage of girls is _____ %

6. Find the volume of a cuboid whose base area is 10 cm^2 and height is 3 cm.

7. a. The ratio between two side lengths of a square is _____

b. $\frac{70 \text{ km}}{1 \text{ hr}} \times \frac{\quad}{\quad} = \frac{70,000 \text{ m}}{1 \text{ hr}}$

6

Alexandria Governorate



Middle Education Zone
Model (A)

1. Choose the correct answer :

1. The area of triangle is _____

A. $s \times s$

B. $\frac{1}{2} \times b \times h$

C. $b \times h$

D. $l \times w$

2. _____ is a conversion factor.

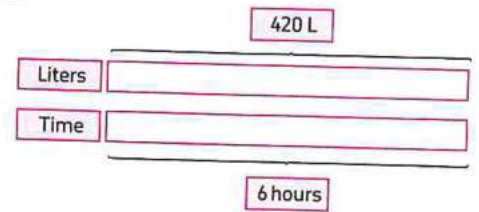
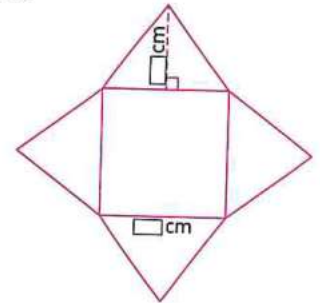
A. 10 minutes

B. 60 seconds

C. 60 minutes

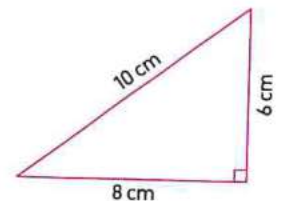
D. 1 day

3. The point $(-4, -5)$ lies in the _____ quadrant.
 A. first B. second C. third D. fourth
4. 10 % of 270 = _____
 A. 54 B. 12 C. 90 D. 27
5. By folding the opposite shape , the solid formed is _____
 A. cube.
 B. triangular prism.
 C. squared pyramid.
 D. cuboid.
6. The unit rate of the opposite tape diagram is _____
 A. 240 L per 6 hours.
 B. 50 L per hour.
 C. 70 L per hour.
 D. 100 L per 2 hour.
7. $\frac{1}{4} \div \frac{3}{4} =$ _____
 A. $\frac{3}{7}$ B. $\frac{1}{3}$ C. $\frac{4}{7}$ D. $\frac{4}{3}$
8. The image of the point $(2, 5)$ by reflection in y-axis is _____
 A. $(-2, -5)$ B. $(2, 5)$ C. $(-2, 5)$ D. $(2, -5)$
9. If 54 L.E. for 9 kg , then the cost of 6 kg is _____ L.E.
 A. 36 B. 9 C. 27 D. 20



2. Answer the following questions :

1. Find the area of the opposite right-angled triangle :



2. If the number of boys in a class is 12 and the number of girls is 15 , then find the ratio between the number of boys to the number of girls.

3. $2.5 \times 0.4 =$ _____

4. Complete :

- a. $\frac{10}{16} = \frac{x}{8}$, then $x =$ _____ b. The reciprocal of $\frac{3}{5}$ is _____
- c. A cube with edge length of 5 cm , then its volume is _____ cm^3 .

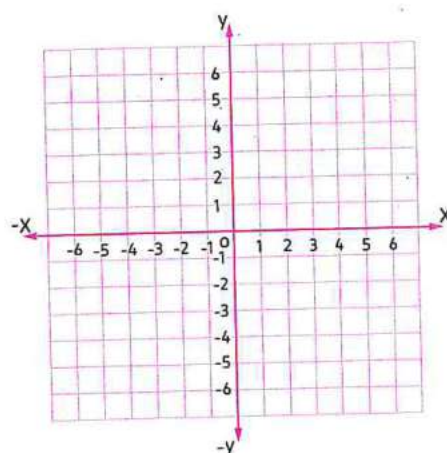
5. The price of a mobile T.V set before discount is 8,000 L.E. If the discount is 20 %.
What is the price after discount ?

6. Find the surface area of a cuboid whose dimensions are 3 cm , 4 cm , 5 cm.

7. Graph the points on the coordinate grid :

A (-1, -3), B (3, -3), C (3, 1), D (-1, 1)

What is the name of the figure ABCD ?



7

Alexandria Governorate



West Educational Administration
Model (A)

1. Choose the correct answer :

1. $\frac{1}{5} \div 5 =$ _____

A. $\frac{1}{25}$

B. 5

C. $\frac{1}{5}$

D. $\frac{25}{25}$

2. $\frac{1}{2}$ of $\frac{1}{4}$ _____

A. $\frac{1}{2}$

B. $\frac{1}{4}$

C. $\frac{1}{8}$

D. $\frac{1}{6}$

3. The reciprocal of the number $\frac{3}{5}$ is _____

A. $\frac{3}{5}$

B. $-\frac{3}{5}$

C. $\frac{5}{3}$

D. $-\frac{5}{3}$

4. Which of the following is a conversion factor ?

A. $\frac{1 \text{ km}}{1000 \text{ meters}}$

B. $\frac{1 \text{ km}}{6 \text{ days}}$

C. $\frac{1 \text{ km}}{3 \text{ hours}}$

D. $\frac{1 \text{ km}}{4 \text{ weeks}}$

5. Which of the following is a unit rate ?

A. 7 km per 1 hour. B. 7 km per 2 hours. C. 7 km per 3 hours. D. 7 km per 4 hours.

6. 10 % of 300 = _____

A. 10

B. 20

C. 30

D. 40

7. The image of the point (3, 4) by reflection in x-axis is _____

A. (3, -4)

B. (-3, 4)

C. (3, 4)

D. (0, 0)

8. The point $(3, -4)$ lies in the _____ quadrant
 A. first B. second C. third D. fourth
9. There are 40 students in a class , 30 of them are girls , and the rest are boys ,
 then the ratio between the number of the boys and number of girls = _____ .
 A. 1:3 B. 3:1 C. 3:4 D. 1:4

2. Answer the following questions :

1. Hala has 2 liters of milk. She distributed them in small bottles of $\frac{1}{4}$ liter each.
 How many bottles did she use ?

2. If the price of one can of juice is 12.5 pounds.
 Find the price of 4 cans of juice.

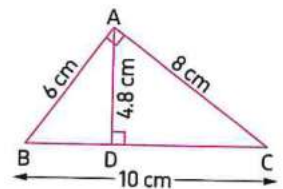
3. A car covers 120 kilometers with 10 litters of fuel ,
 How many kilometers it cover with 3 litters of fuel ?

4. The three dimensions of a cuboid are 20 cm , 15 cm and 10 cm ,
 what is the volume of this cuboid ?

5. There is a 10 % discount on a suit marked at 1,000 L.E. ,
 what is the price of this suit after discount ?

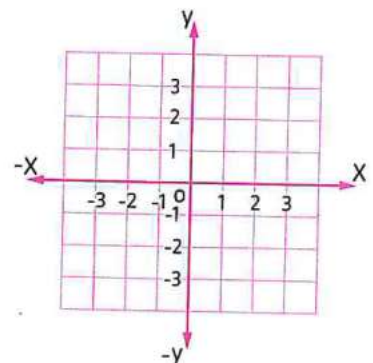
6. In the opposite figure :

ABC is a right-angled triangle at A , $\overline{AD} \perp \overline{BC}$
 , if $AB = 6$ cm , $AC = 8$ cm ,
 $BC = 10$ cm and $AD = 4.8$ cm
 Find the area of ΔABC



7. In the opposite lattice :

Plot the points A $(2, 2)$, B $(-2, 2)$
 and C $(-2, -2)$, D $(2, -2)$
 , then state the name of figure ABCD.





1. Choose the correct answer :

1. $3.1 \times 0.3 =$ _____

A. 9.3

B. 0.93

C. 0.931

D. 9.03

2. $\frac{8}{5} \times \frac{5}{2} =$ _____

A. $\frac{11}{9}$

B. 4

C. 3

D. $\frac{2}{7}$

3. $10 : 15 =$ _____

A. 2 : 3

B. 3 : 5

C. 5 : 6

D. 5 : 8

4. $10\% + 60\% =$ _____

A. 70

B. 70 %

C. 80 %

D. 800

5. If $\frac{6}{18} = \frac{x}{3}$, then the value of x = _____

A. 1

B. 3

C. 6

D. 15

6. $\frac{10 \text{ m}}{1 \text{ hr}} \times \frac{\quad}{\quad} = \frac{1 \text{ m}}{6 \text{ min}}$

A. $\frac{60 \text{ min}}{1 \text{ hr}}$

B. $\frac{1 \text{ hr}}{60 \text{ min}}$

C. $\frac{1 \text{ m}}{100 \text{ min}}$

D. $\frac{100 \text{ cm}}{1 \text{ m}}$

7. The point (2 , - 3) lies in _____ quadrant.

A. 1st

B. 2nd

C. 3rd

D. 4th

8. A rhombus of side length 7 cm and its height length is 4 cm , then its area = _____ cm^2

A. 42

B. 21

C. 28

D. 13

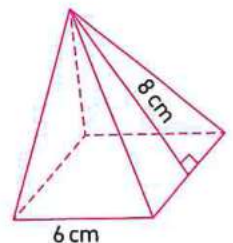
9. The surface area of the opposite square pyramid = _____ cm^2

A. 60

B. 120

C. 130

D. 132



2. Answer the following questions :

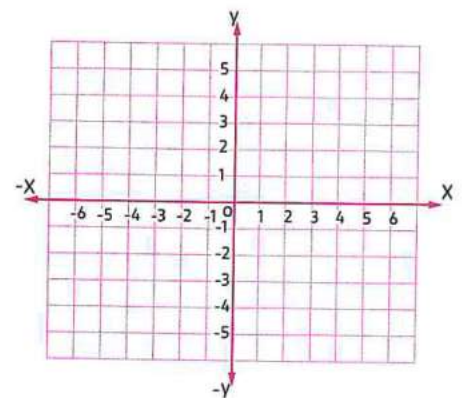
1. If $\frac{3}{7}$ of a cake is divided equally among three friends , what is the share of each one ?

2. The ratio between the number of red flowers to the number of yellow flowers is 7 : 5 .
If there are 6 more red flowers than yellow flowers what is the total number of flowers ?

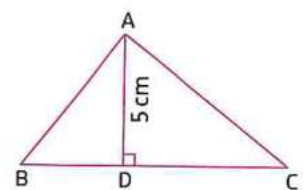
3. Two machines produce cloth , the first one produces 250 meters in 5 hours and the second produces 320 meters in 8 hours. Which machine is better ? and why ?

4. On the sale , a shop offers a discount 10 % , if the price of an article is 1,000 L.E.
Find the price after discount.

5. Plot the following points on the opposite grid :
A (4 , 3) , B (− 1 , 3) and C (− 1 , − 2) , then identify
the type of the triangle according to its angles.



6. ABC is a triangle in which $\overline{AD} \perp \overline{BC}$, $AD = 5$ cm
 , area of $\triangle ABC = 15$ cm²
Find the length of $\overline{BC}$



7. Find the volume of the cuboid whose dimensions are 12 cm , 8 cm and 5 cm

9

El-Sharkia Governorate



G.L.S Administration
Mathematics Supervision Model (A)

1. Choose the correct answer :

1. $7 : 21 =$: (in the simplest form)

A. 7 : 3

B. 1 : 3

C. 3 : 1

D. 3 : 7

2. the reciprocal of $\frac{4}{5}$ is

A. $\frac{4}{5}$

B. $\frac{5}{5}$

C. 0.8

D. $\frac{5}{4}$

3. $\frac{1}{2} =$ %

A. 50

B. 100

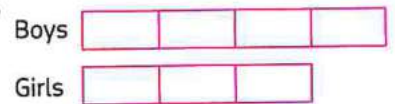
C. 25

D. 55

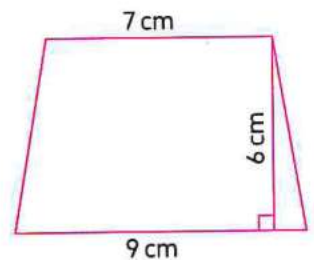
4. The y-coordinate of the ordered pair (3, 5) is _____
 A. 5 B. 3 C. 15 D. (5, 3)
5. Area of triangle of base 6 cm and height 5 cm is _____ cm^2
 A. 6 B. 30 C. 15 D. 45
6. The surface area of the cube = _____
 A. $b \times h$ B. $\frac{1}{2} \times b \times h$ C. $l \times w \times h$ D. $6 \times s \times s$
7. The squarad base pyramid has _____ vertices.
 A. 4 B. 5 C. 6 D. 7
8. 60 m per min = _____ m per sec.
 A. 1 B. 10 C. 100 D. 1,000
9. 60 % of 40 = _____
 A. 4 B. 12 C. 24 D. 2,400

2. Answer the following questions :

1. Using the opposite tape diagram , if the number of boys is 28.
 Find the number of girls.



2. Find area of the opposite trapezium.



3. Find volume of a cuboid of length 8 cm, width 5 cm and height 10 cm.

4. If A (2, - 5) and B (2, 3). Find the length of the line segment $\overline{AB}$

5. If the length of a piece of cloth is 875 cm. How many meters is the piece length ?

6. If the ratio between two numbers is 3 : 5 , and the smaller number is 21 .
 Find the greater number.

7. The price of a shirt is 300 L.E. , and the store offers a discount 15% off.
 Find the price after the discount.

10

El-Monofia Governorate



Berket El-Saba Directorate
Mathematics Supervision Model (A)

1. Choose the correct answer : (calculator is not allowed)

1. The image of the point $(-1, 5)$ by reflection in x-axis is _____

- A. $(5, -1)$ B. $(1, -5)$ C. $(-1, -5)$ D. $(1, 5)$

2. 20 % of 80 = _____

- A. 160 B. 1,600 C. 1.6 D. 16

3. If $\frac{3}{5} = \frac{x}{15}$, then $x + 1 =$ _____

- A. 9 B. 10 C. 8 D. 7

4. The area of opposite trapezium = _____ cm^2

- A. 20 B. 50 C. 25 D. 40

5. A car consumes $\frac{1}{10}$ liter of petrol per kilometer, then it cover _____ kilometer per liter.

- A. 10 B. 100 C. 20 D. 5

6. The reciprocal of $\frac{3}{4}$ is _____

- A. 4.3 B. $1\frac{1}{3}$ C. $\frac{3}{4}$ D. 0.75

7. $3.5 \text{ km} \times$ _____ = 3,500 m

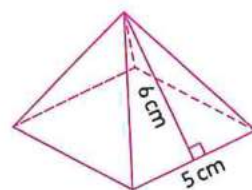
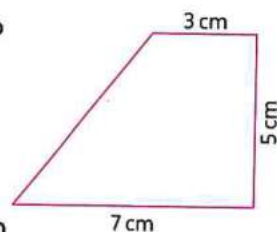
- A. $\frac{1 \text{ km}}{1,000 \text{ m}}$ B. $\frac{1 \text{ m}}{100 \text{ cm}}$ C. $\frac{100 \text{ cm}}{1 \text{ km}}$ D. $\frac{1,000 \text{ m}}{1 \text{ km}}$

8. $\frac{2}{5} \div 2 =$ _____

- A. 5 B. $\frac{1}{5}$ C. $\frac{4}{5}$ D. $\frac{5}{4}$

9. The area of opposite square pyramid is _____ cm^2

- A. 25
B. 15
C. 40
D. 85



2. Answer the following questions :

1. The ratio between number of boys and girls in a school 3 : 5, if the number of girls 250 girls. Find the number of boys.

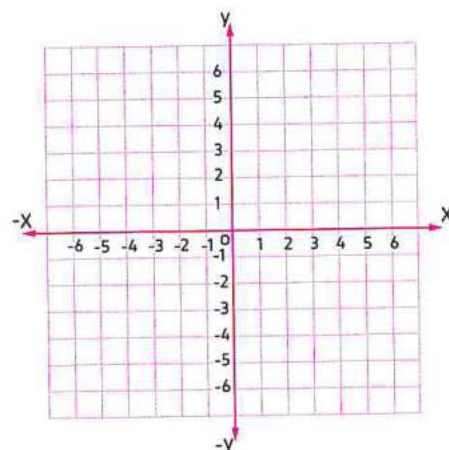
2. Find the surface area of the cuboid whose length 6 cm, width 5 cm and height 4 cm.

3. The price of a T.V. set is 20,000 L.E. The T.V. is on sale for discount 15 % on a white Friday sale. Find the selling price of the T.V.

4. Find the area of the triangle whose base length 10 cm and its corresponding height 6 cm.

5. A runner covered $\frac{4}{5}$ kilometer in 2 laps. How many kilometers did he run in one lap ?

6. Plot the points A (-1, 2), B (3, 2), C (3, 5), D (-1, 5)



7. A factory produces 7,200 bottles of soda in 8 hours. What is the rate of production ?

11

El-Gharbia Governorate



Central Mathematics Supervision
Official Language Schools Model (A)

1. Choose the correct answer :

1. If $\frac{4}{7}$ is equivalent to $\frac{x}{35}$, then $x - 3 =$ _____

A. 4

B. 20

C. 17

D. 23

2. $54.45 \div 0.9 =$ _____

A. 60.5

B. 605

C. 0.605

D. 6.05

3. If the percentage of boys in a school is 55 %, then the percentage of girls is _____ %

A. 55

B. 35

C. 45

D. 100

4. 120 km per hour = _____ meters per minute.

A. 20

B. 200

C. 2,000

D. 20,000

5. $3.4 \times 0.2 =$ _____

A. 68

B. 6.8

C. 0.68

D. 0.068

6. 15.5 % of 700 = _____

A. 108.5

B. 180.5

C. 108

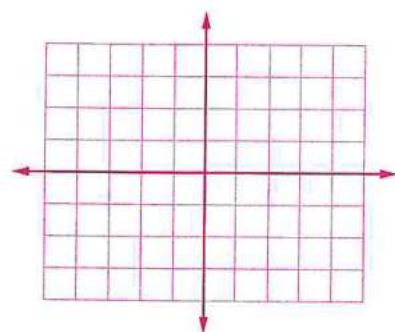
D. 180

7. The volume of a cuboid whose base area 28 cm^2 and height 7 cm is _____ cm^3
 A. 270.2 B. 207.2 C. 202 D. 196
8. The area of rhombus whose perimeter is 40 cm and height 8 cm is _____ cm^2
 A. 320 B. 80 C. 160 D. 48
9. The surface area of a cuboid its length 10 cm , width 5 cm and height 6 cm is _____
 A. 21 cm^2 B. 56 cm^2 C. 280 cm^2 D. 300 cm^2

2. Answer the following questions :

1. The two base lengths of a parallelogram are 8 cm , 6 cm and the smaller height is 3 cm . Calculate the greater height of the parallelogram.

2. Plot the points $A(3, 4)$, $B(1, 1)$, $C(0, 4)$ join them and find the image of each point by reflection across the y-axis.



3. Find :

- a. $\frac{2}{7} \times 5\frac{1}{4} =$ _____ b. $5 \div 2\frac{1}{2} =$ _____
 c. If $\frac{x}{12} = 36\%$, then $x =$ _____

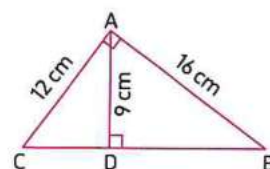
4. A machine produce 480 bottles in 6 hours. Find the production rate.

5. A man bought a T.V. set , he was given a 15% discount of its marked price. Which was $10,000 \text{ L.E.}$ Find its price after discount.

6. If the price of one meter of cloth is 64.5 L.E. What is the cost of 2.4 meters of cloth?

7. In the opposite figure :

ABC is a right-angled triangle at A , $\overline{AD} \perp \overline{BC}$
 , if $AB = 16 \text{ cm}$, $AC = 12 \text{ cm}$ and $AD = 9 \text{ cm}$
 Find the area of $\triangle ABC$



12

El-Dakahlia Governorate

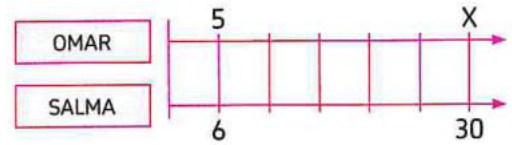


Maths Supervision
Model (A)

1. 1. Choose the correct answer : (Calculator is not allowed)

a. From the opposite double number line , the value of X = _____

- A. 15 B. 20
C. 25 D. 30



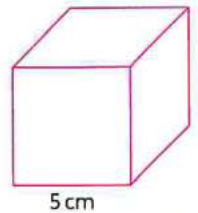
b. The area of the triangle whose base length is 6 cm and its corresponding height is 5 cm equals _____ cm^2

- A. 15 B. 30 C. 60 D. 120

c. Which of the following is NOT equivalent to the ratio 3 : 4 ?

- A. 75 % B. $\frac{6}{8}$ C. 0.75 D. $\frac{4}{3}$

2. Find the total surface area of the cube whose edge length is 5 cm ?



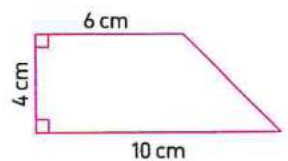
2. 1. Choose the correct answer :

a. A car covered 240 km in 3 hours , then its speed rate = _____ km/hour.

- A. 720 B. 72 C. 80 D. 8

b. The area of the opposite trapezium = _____ cm^2

- A. 40 B. 60
C. 32 D. 64



c. The volume of the cuboid whose dimensions are 3 cm , 4 cm , 5 cm is _____ cm^3

- A. 12 B. 17 C. 60 D. 120

2. If the ratio between two numbers is 3 : 5 and the smaller one is 15 , find the greater one.

3. 1. Choose the correct answer :

a. The area of the parallelogram whose base 9 cm and its corresponding height is 6 cm is _____ cm^2

- A. 13.5 B. 27 C. 54 D. 108

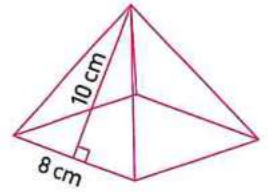
b. The value of 20 % from 600 is _____

- A. 12,000 B. 1,200 C. 120 D. 12

c. The image of the point $(-3, 3)$ by reflection in x-axis is _____

- A. $(-3, -3)$ B. $(3, 3)$ C. $(3, -3)$ D. $(-3, 3)$

2. Find the surface area of the opposite square pyramid ?



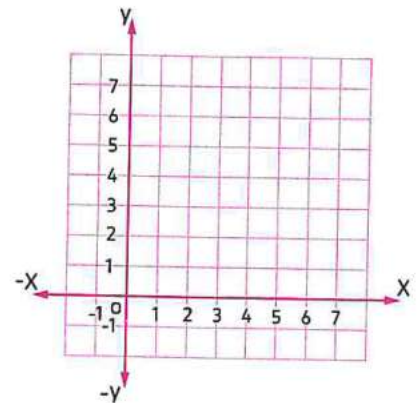
4. 1. If the price of a shirt is 300 L.E. Find its price after discount 10 %.

2. Find the result of :

a. $12 \div \frac{1}{3} =$ _____ b. $1.6 \times 0.3 =$ _____

5. 1. Amira bought 2 kg of flour for 50 L.E. Find what she paid to buy 6 kg ?

2. Locate the following points on the coordinate plane and connect the points in order A (3, 2), B (3, 6), C (6, 6), then find the length of $\overline{AB}$?



13

Ismailia Governorate



Directorate of Education
Directing Mathematics Model (A)

1. Choose the correct answer :

1. $\frac{1}{8} \div \frac{3}{8} =$ _____

A. $\frac{1}{8}$

B. $\frac{1}{3}$

C. $\frac{3}{8}$

D. $\frac{3}{64}$

2. $3.66 \div 0.3 =$ _____

A. 12.2

B. 1.22

C. 122

D. 1,220

3. 20 % of 80 = _____

A. 20

B. 80

C. 16

D. 1,600

4. If 2 : 7 is equivalent to x : 21 , then x = _____

A. 3

B. 6

C. 7

D. 21

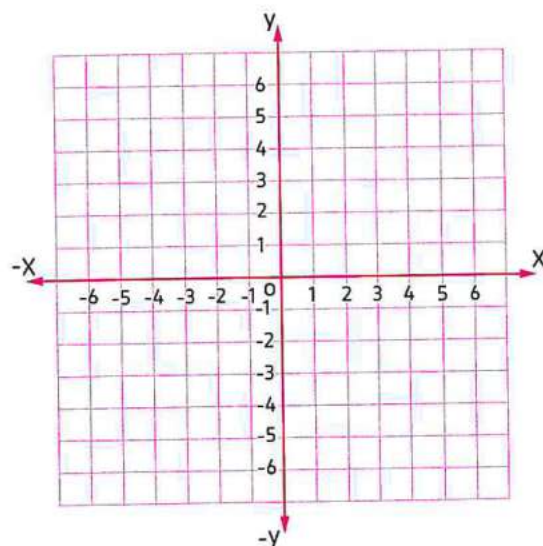
5. $\frac{1 \text{ kg}}{\text{_____}}$ is a conversion factor.
 A. 2 hours B. 100 cm C. 1,000 gm D. 1,000 m
6. The image of the point $(-3, 5)$ by reflection in the y-axis is _____
 A. $(-3, 5)$ B. $(3, 5)$ C. $(-3, -5)$ D. $(-3, 0)$
7. A square of side length 6 cm, then its area = _____ cm^2
 A. 6 B. 24 C. 36 D. 18
8. The surface area of the cube = _____
 A. S^2 B. $S \times S \times S$ C. $6 \times S \times S$ D. $S + S + S$
9. $25 : 20 = \text{_____} : \text{_____}$
 A. $10 : 5$ B. $1 : 2$ C. $2 : 1$ D. $5 : 4$

2. Answer the following questions :

10. If the ratio of the number of boys to the number of girls in a class is $3 : 2$ and the number of boys in this class is 24, what is the total number of students in this class?
11. A man bought a T.V. set, he was given a 15 % discount of its marked price which was 10,000 L.E. Find its price after discount.
12. Convert [490 pounds per 7 kg] to a unit rate?
13. Ali has 6 liters of milk. He needs to divided it into bottles of $\frac{3}{4}$ liter each.
 How many bottles will he need?
14. Find the area of the triangle whose base 6 cm and its corresponding height 4 cm.
15. Find the surface area of the cuboid whose length 8 cm, width 5 cm, and height 3 cm.
16. Plot the following points on the coordinate grid then connect the points what is the name of the figure ABCD :

A $(1, -1)$, B $(1, 3)$, C $(-3, 3)$, D $(-3, -1)$

The name of ABCD _____



14

Damietta Governorate



Math Supervision

1. Choose the correct answer : (Calculator is not allowed)

1. $1 - 25\% = \text{—————}\%$
 A. 0.25 B. 75 C. 0.75 D. 24
2. 36 kilometers per hour = ————— meters per second.
 A. 1,000 B. 100 C. 10 D. 1
3. $0.676 \times 0.1 = \text{—————}$
 A. 67.6 B. 0.0676 C. 16.76 D. 6.707
4. The distance between the two points $(-1, 3)$ and $(4, 3)$ is ————— units.
 A. 5 B. 3 C. 0 D. 4
5. The reciprocal of 1 is —————
 A. -1 B. 1 C. 0 D. $\frac{1}{2}$
6. If the x-coordinate of a point is zero, then the point lies —————
 A. in 1st quadrant. B. in 2nd quadrant. C. on x-axis. D. on y-axis.
7. The number of heights of any triangle is —————
 A. 1 B. 2 C. 3 D. 4
8. A square pyramid has ————— vertices
 A. 4 B. 5 C. 6 D. 3
9. A car consumes $\frac{1}{10}$ liter of petrol to cover 1 km, then it covers ————— km per liter.
 A. 1 B. 5 C. 10 D. 20

2. Answer the following questions :

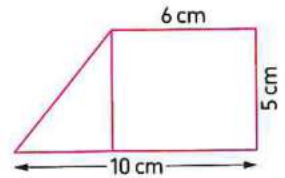
1. Find the value of x if $\frac{9}{x} = 30\%$

2. If the ratio between two numbers is 3 : 5 and the greater number is 15, find the smaller number.

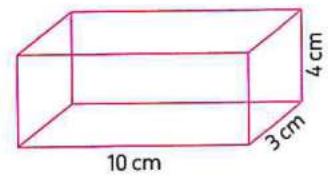
3. A factory produce 7,200 bottles of soda in 8 hours, what is the rate of production ?

4. A road of length 8 km. A road lamp is placed every $\frac{1}{5}$ km , how many lamps does the road need ?

5. Find the area of the opposite trapezium.

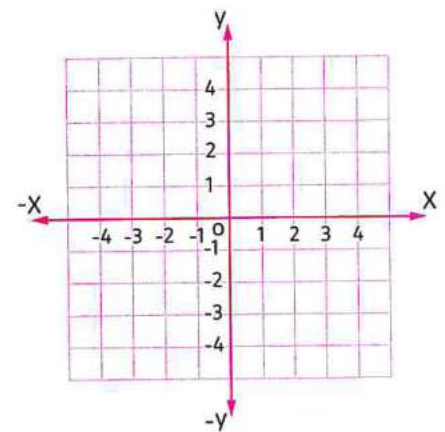


6. Find the volume of the opposite cuboid.



7. Plot the points A (2 , 3) on the opposite lattice , then find its image by :

- a. Reflection in x-axis.
b. Reflection in y-axis



15

El-Fayoum Governorate



Directorate of Education
Supervision of Mathematics Model (B)

1. Choose the correct answer :

1. $\frac{1}{5} \div 1 =$ _____

A. $\frac{1}{5}$

B. $\frac{1}{25}$

C. 25

D. $\frac{2}{25}$

2. The point (- 3 , - 2) lies _____

A. in first quadrant. B. on x-axis.

C. in third quadrant. D. on y-axis.

3. $1 - 25\% =$ _____ %

A. 25

B. 7.5

C. 75

D. 125

4. A worker paints a wall with an area 36 m^2 in 3 hours , then the rate of the painting is _____ m^2/hour .

A. 6

B. 7

C. 8

D. 12

5. $\frac{1 \text{ km}}{1000 \text{ m}}$ is a conversion factor.

- A. 1 hour B. 100 cm C. 1,000 gm D. 1,000 m

6. $\frac{2}{5} = \frac{\quad}{100} \%$

- A. 7 B. 20 C. 40 D. 30

7. The reciprocal of $\frac{1}{9}$ is _____

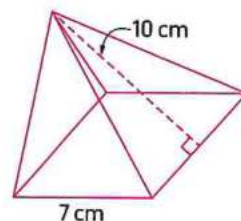
- A. 7 B. 8 C. 9 D. 1

8. If the height of a triangle is 6 cm and the length of its corresponding base is 8 cm, then the area of this triangle = _____ cm^2

- A. 56 B. 24 C. 49 D. 64

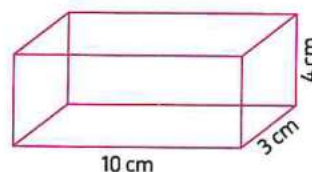
9. The surface area of the opposite pyramid is _____ cm^2

- A. 70
B. 140
C. 189
D. 343



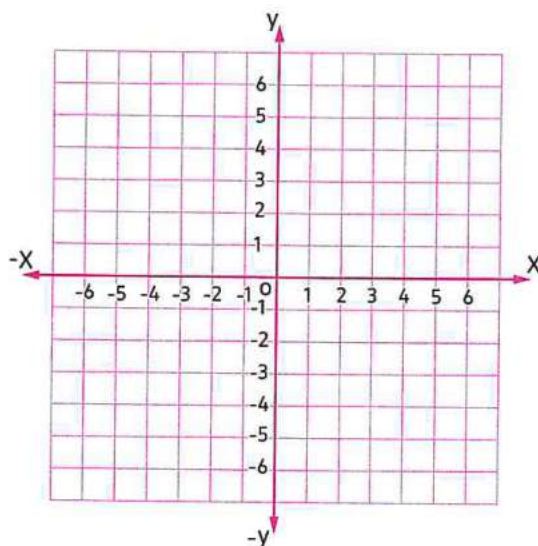
2. Answer the following questions :

1. Find the volume of the opposite cuboid ?



2. If the ratio between the number of boys and girls is 2 : 3 and the number of girls is 60, then find the number of boys ?

3. Plot the points A (3, 4), B (1, 1) and C (0, 4)
Join them and find the image of each point
by reflection across x-axis.



4. Ramy has 6 liters of juice , he divided them into small bottles of $\frac{2}{3}$ liter each , how many bottles did he need ?

5. Sara got 45 marks out of 50 in an exam. Find the percentage of her marks ?

6. Find the value of : 1.2×0.25

7. Find the value of x if $\frac{x}{20} = \frac{9}{4}$

16

Beni Suef Governorate



Samasta Directorate
Model (A)

1. Choose the correct answer : (Calculator is not allowed)

1. $54.45 \div 0.9 =$ _____

A. 60.5

B. 605

C. 0.605

D. 6.05

2. 20 % of 90 pounds = _____ pounds.

A. 9

B. 18

C. 27

D. 180

3. The opposite tape diagram represent the ratio _____

A. 5 : 3

B. 3 : 8

C. 5 : 8

D. 8 : 3

4. If the dimensions of a cuboid are 2 cm , 4 cm and 10 cm , then the volume of this cuboid is _____ cm^3

A. 80

B. 16

C. 60

D. 18

5. Ali read 35 pages in 5 days , then the rate of performance = _____ pages per day.

A. 175

B. 7

C. 40

D. 30

6. The image of the point $(-4, 4)$ by reflection in x-axis is _____

A. $(4, 4)$

B. $(-4, 4)$

C. $(-4, -4)$

D. $(-3, 0)$

7. A parallelogram whose area is 40 cm^2 and its base length is 8 cm, then its corresponding height is _____ cm

A. 9

B. 8

C. 5

D. 8.5

8. If $111 \times 23 = 2,553$, then $1.11 \times 2.3 =$ _____

A. 2.553

B. 25.53

C. 255.3

D. 3.552

9. Which of the following is not a conversion factor ?

A. $\frac{1 \text{ km}}{1,000 \text{ m}}$

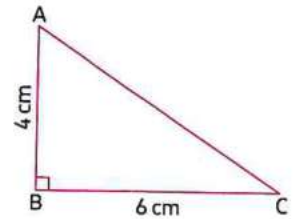
B. $\frac{60 \text{ min}}{1 \text{ hour}}$

C. $\frac{90 \text{ km}}{1 \text{ hour}}$

D. $\frac{1 \text{ day}}{24 \text{ hours}}$

2. Answer the following questions :

1. Find the area of opposite triangle.



2. The price of a mobile phone before discount is 6,000 L.E. if the discount was 20 %
What is the price after discount ?

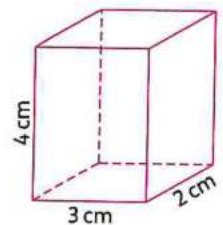
3. Two machines produce cloth , the first one produces 480 meters in 8 hours and the second one produces 355 meters in 5 hours , which machine is better ?

4. From the opposite proportion table.
Find the value of x.

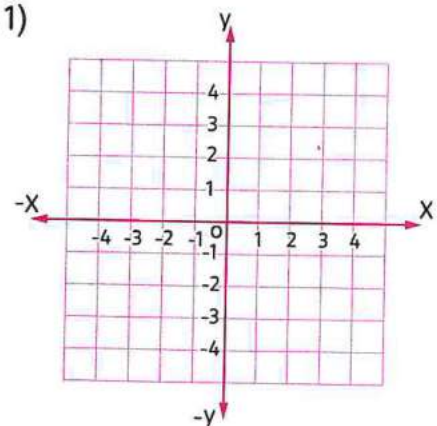
kg	1	2	3	4
L.E.	20	40	x	80

5. A machine produces 550 bottles in 5 hours. Find the production rate.

6. Find the surface area of the opposite cuboid.



7. Plot the points A (1, -1), B (1, 3), C (-3, 3) and D (-3, -1)
What is the name of figuer ABCD ?





1. Choose the correct answer : (Calculator is not allowed)

1. $1 \div \frac{1}{6} =$ _____

- A. $\frac{2}{6}$ B. $\frac{1}{6}$ C. 6 D. 1

2. A cube has a side length of 5 cm , then its surface area = _____ cm^2

- A. 25 B. 125 C. 150 D. 6

3. The ratio 15 to 25 is equivalent to the ratio _____ : 5

- A. 10 B. 40 C. $\frac{3}{5}$ D. 3

4. If $\frac{4}{5} = \frac{x}{15}$, then the value of x = _____

- A. 10 B. 12 C. 14 D. 16

5. There are 20 boys on the field , 50 % of them are wearing blue shirts , then the number of boys wearing blue shirts = _____

- A. 10 B. 70 C. 100 D. 30

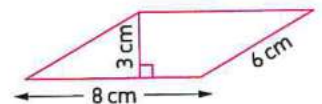
6. The quotient of $8.44 \div 0.02 =$ _____

- A. 4.22 B. 42.2 C. 422 D. 0.422

7. In the opposite figure :

The area of opposite parallelogram = _____ cm^2

- A. 12 B. 24
C. 18 D. 21



8. Which of the following is a conversion factor ?

- A. $\frac{1 \text{ km}}{100 \text{ m}}$ B. $\frac{1 \text{ day}}{7 \text{ weeks}}$ C. $\frac{1 \text{ m}}{10 \text{ cm}}$ D. $\frac{1 \text{ km}}{1,000 \text{ m}}$

9. The image of the point $(-3, 4)$ by reflection in the y-axis is _____

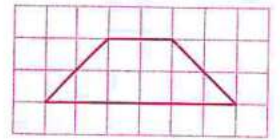
- A. $(-3, -4)$ B. $(3, 4)$ C. $(3, -4)$ D. $(4, 3)$

2. Answer the following questions :

1. In a classroom , if the ratio of the number of boys to the number of girls is 4 to 3 and there are 20 boys in the class , how many girls in the class ?

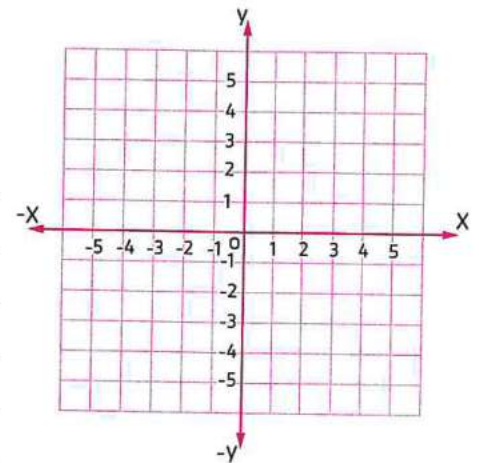
2. Convert (12 kilometers per 3 hours) to a unit rate ?

3. Calculate the area of the opposite trapezoid.



4. You go to the movies and want to buy popcorn and you have two options : the first package hold 5 cups for 50 EGP and the second package hold 8 cups for 68 EGP , which is the best option to buy ? Explain your answer ?

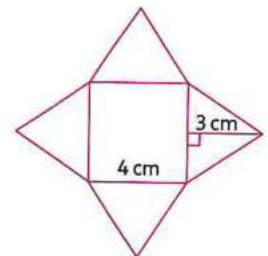
5. Use graph paper to draw the point A $(-3, -2)$, B $(-3, 5)$, C $(3, -2)$ and then identify the type of geometric figure ABC ?



6. Ezz has 800 pounds , of which he spent 20 % to buy a new shirt. Find what ezz spent ?
From this question , write the value that represent the part , the whole and the percentage ?

The total	The part	Percentage
_____	_____	_____

7. Calculate the surface area of the opposite square pyramid.



18

Qena Governorate



Math General Supervision
Experimental Language School (Model A)

1. Choose the correct answer :

1. $\frac{7}{20} = \text{_____} \%$

A. 14

B. 28

C. 35

D. 70

2. The point $(-2, -3)$ is located in the _____ quadrant.

A. first

B. second

C. third

D. fourth

3. $6.25 \div 0.25 = 625 \div \underline{\hspace{2cm}}$

- A. 12 B. 20 C. 15 D. 25

4. The area of parallelogram of base length 6 cm and corresponding height 5 cm = $\underline{\hspace{2cm}}$ cm²

- A. 10 B. 12 C. 30 D. 36

5. The volume of cuboid with dimensions 6 cm, 4 cm and 5 cm is $\underline{\hspace{2cm}}$

- A. 120 cm² B. 12 cm³ C. 150 cm³ D. 120 cm³

6. Which of the following is not a conversion factor?

- A. $\frac{60 \text{ minute}}{1 \text{ second}}$ B. $\frac{1 \text{ l}}{1,000 \text{ ml}}$ C. $\frac{1,000 \text{ m}}{1 \text{ km}}$ D. $\frac{1 \text{ hr}}{60 \text{ minute}}$

7. A printer prints 60 paper in 4 minutes, then its unit rate = $\underline{\hspace{2cm}}$ papers/min.

- A. 5 B. 10 C. 15 D. 20

8. 12 % of 1,200 = $\underline{\hspace{2cm}}$

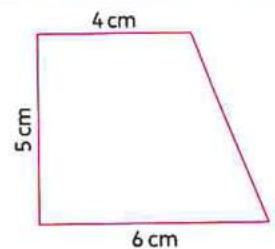
- A. 24 B. 36 C. 120 D. 144

9. $\frac{3}{7} \times \underline{\hspace{2cm}} = 1$

- A. $\frac{3}{7}$ B. $2 \frac{1}{3}$ C. $\frac{2}{7}$ D. $\frac{7}{2}$

2. Answer the following questions :

1. Find the area of the following figure :



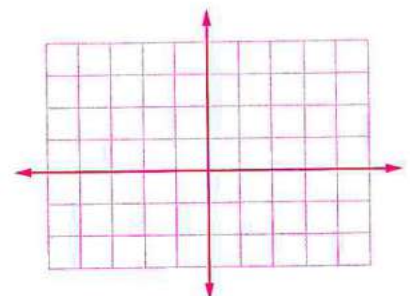
2. Find the result of each of :

a. 2.5×3.7

b. $4.8 \div 0.06$

3. Draw the rectangle ABCD where :

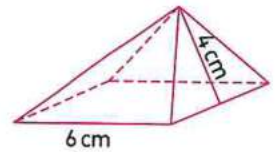
A (- 2 , 1) , B (2 , 1) , C (2 , 3) , D (- 2 , 3) , then find its image by reflection in x-axis ?



4. Find the total surface area of a cube of edge length 3 cm.

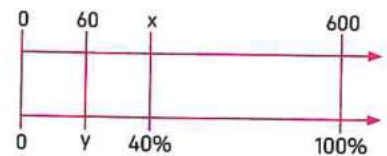
5. The ratio between two numbers is 3 : 4 and the value of smaller number is 21. Find the value of the greater number ?

6. Find the total surface area of the opposite figure :



7. a. Use the opposite double number line to find the value of x and y

x = _____, y = _____



- b. Use conversion factor to convert :

3 km/hr = _____ = _____ m/minute.

19

Aswan Governorate



Math supervision
Model (c)

1. Choose the correct answer :

- 20% of the number 80 is equal to _____
A. 16 B. 8 C. 20 D. 80
- The point $(-2, 4)$ lies in the _____ quadrant.
A. first B. second C. third D. fourth
- The reciprocal of the number 5 is _____
A. 5 B. 0.5 C. $\frac{1}{5}$ D. -5
- $\frac{1}{3} \div \frac{1}{6} =$ _____
A. 2 B. 3 C. 4 D. 9
- If $\frac{1}{3}$ of a number is equal to 10, then the number is equal to _____
A. 50 B. 30 C. 10 D. 20
- Number of heights of the acute-angled triangle = _____ heights.
A. 3 B. 2 C. 1 D. 0
- If the base length of a parallelogram is 11 cm, and its corresponding height is 7 cm, then its area = _____
A. 18 cm^2 B. 18 cm C. 77 cm^2 D. 77 cm.
- The ratio between 10 : 25 = _____ (in its simplest form)
A. 2 to 5 B. 5 to 2 C. 2 : 1 D. 5 : 2

9. The conversion factor to convert from seconds into minutes is _____

A. $\frac{1}{10}$

B. $\frac{1}{120}$

C. $\frac{1}{60}$

D. $\frac{1}{50}$

2. Answer each of the following questions :

10. Find the volume of the cuboid whose dimensions are : 3 cm , 3 cm , 2 cm

11. A cube its edge length is 20 cm , calculate its total surface area ?

12. We want to divide 2 liters of milk in packages so that each package contains $\frac{1}{8}$ liters.
How many packages do we need ?

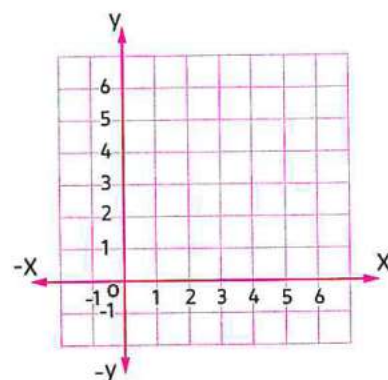
13. We ate five out of 10 banana fruits. What is the percentage of the banana fruits did we eat ?

14. If 2 cups of flour to make 12 loaves of Aish Baladi. How many cups of flour would you need to make 24 loaves of Aish Baladi ?

15. In one of the classrooms , if the ratio of the number of boys to the number of girls is 5 to 4 , the number of boys in this class is 25 boys , what is the number of girls in this class ?

16. Locate the following points on the coordinate plane , then join the points to form a figure :
A (1,1) , B (1,5) , C (5,5) , D (5,1) , then write the name of figure.

The figure's name is _____





1. Choose the correct answer :

1. 50% of 3,600 pounds = _____ pounds.

- A. 3,600 B. 1,800 C. 1,000 D. 500

2. The distance between (7, 3), (2, 3) is _____ units.

- A. 3 B. 4 C. 5 D. 7

3. A parallelogram, the length of the base 8 cm and the corresponding height is 10 cm, it's area = _____ cm^2

- A. 20 B. 40 C. 80 D. 108

4. $5 \times \frac{4}{5}$ $5 \div \frac{4}{5}$

- A. < B. = C. > D. nothing

5. The image of the point (3, -3) by reflection across the y-axis is the point _____

- A. (-3, -3) B. (3, -3) C. (-3, 3) D. (3, 3)

6. If $\frac{4}{9} = \frac{A}{63}$, then A = _____

- A. 11 B. 60 C. 28 D. 36

7. 1,200 grams = _____ $\times$ 1.2 kg

- A. $\frac{1 \text{ kg}}{100 \text{ gm}}$ B. $\frac{1 \text{ kg}}{1,000 \text{ gm}}$ C. $\frac{1,000 \text{ gm}}{1 \text{ kg}}$ D. $\frac{100 \text{ gm}}{1 \text{ kg}}$

8. $0.5 \times 0.7 =$ _____

- A. 0.12 B. 0.35 C. 3.5 D. 35

9. The reciprocal of the fraction $\frac{2}{7}$ is _____

- A. $\frac{5}{7}$ B. $\frac{7}{2}$ C. $\frac{-7}{2}$ D. $\frac{-2}{7}$

2. Answer the following questions :

10. Find the volume of the cube whose side length 5 cm ?

11. A right-angled triangle, with base length 8 cm and corresponding height 6 cm.
Find it's area.

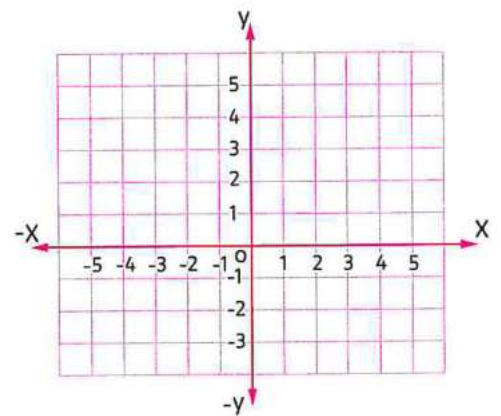
12. Mustafa reads 175 pages of a story per week. Find his daily reading rate.

13. The price of a computer is 24,000 L.E. , if the discount is 25 %.
What is the price after the discount ?
-

14. Find the result : $\frac{2}{3} \div \frac{4}{9} =$ _____

15. Find the volume of the cuboid whose length 12 cm , width 6 cm and height 3 cm ?
-

16. Plot the points : A (2 , 1) , B (2 , 4) , C (− 3 , 4) ,
D (− 3 , 1) on the coordinate plane
Join the Points.
What is the name of the figure ABCD ?
-
-



Answers of

Directorate Exams

1

Cairo

1. 1. C 2. A 3. C
4. A 5. D 6. C
7. C 8. D 9. A
2. 1. The number of pieces
 $= 8 \div \frac{1}{2} = 8 \times 2 = 16$ pieces
 2. The ratio $= 20 : 25 (\div 5)$
 $= 4 : 5$
 3. The volume $= 10 \times 5 \times 4$
 $= 200 \text{ cm}^3$
 4. The discount $= 10\%$ of 20,000 L.E.
 $= 2,000 \text{ L.E.}$
 The price after discount
 $= 20,000 - 2,000 = 18,000 \text{ L.E.}$
 5. The area $= \frac{1}{2} \times 6 \times 7 = 21 \text{ cm}^2$
 6. Unit rate $= \frac{40}{4} = 10 \text{ km per hour}$
 The distance $= 5 \times 10 = 50 \text{ km}$
 7. The height $= 30 \div 6 = 5 \text{ cm}$

2

Cairo

1. 1. B 2. C 3. B
4. A 5. C 6. B
7. C 8. A 9. C
2. 1. The area $= 12 \times 5 = 60 \text{ cm}^2$
 2. The volume $= 8 \times 5 \times 10$
 $= 400 \text{ cm}^3$
 3. The area $= \frac{1}{2} \times 8 \times 6 = 24 \text{ cm}^2$

4. The length of each part
 $= \frac{7}{8} \div 7 = \frac{7}{8} \times \frac{1}{7} = \frac{1}{8} \text{ m}$

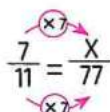
5. $\frac{3}{2}$

6. 10% of 700 = 70 pounds
 $20\% = 2 \times 10\%$
 20% of 700 = 2×70
 $= 140$ pounds
 The amount of discount
 $= 140$ pounds

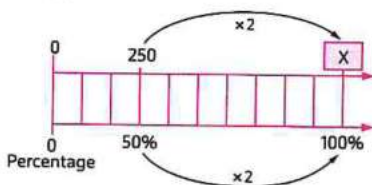
7. a. (3, 5) b. (-3, 4)

3

Cairo

1. 1. C 2. B 3. A
4. A 5. B 6. C
7. C 8. B 9. C
2. 1. 10% of 900 = 90 pounds
 $60\% = 6 \times 10\%$
 60% of 900 = 6×90
 $= 540$ pounds
 The amount = 540 pounds
 2. a. The unit rate =
 $400 \div 8 = 50$ pounds per kg
 b. The price =
 $7 \times 50 = 350$ pounds
 3. a. 
 $\frac{7}{11} \times 7 = \frac{X}{77}$
 $\frac{X}{77} \times 7 = X$
 $X = 7 \times 7 = 49$

b.



$$25\% \text{ of } 1,000 = 250$$

$$50\% \text{ of } x = 250$$

$$x = 250 \times 2 = 500$$

4. a. 2

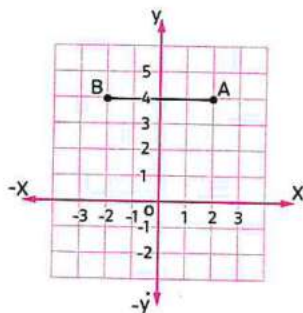
$$b. 4 \div \frac{2}{5} = 4 \times \frac{5}{2} = 10$$

$$5. \text{ The area} = 8 \times 3 = 24 \text{ cm}^2$$

6. The surface area

$$\begin{aligned} &= [10 \times 13] + [5 \times 10] + [12 \times 10] \\ &+ [\frac{1}{2} \times 5 \times 12] + [\frac{1}{2} \times 5 \times 12] \\ &= 130 + 50 + 120 + 30 + 30 \\ &= 360 \text{ cm}^2 \end{aligned}$$

7. a.



b. The distance between A and B = 4 units

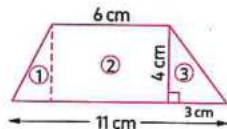
4

Giza

- | | | |
|---------|------|------|
| 1. 1. B | 2. C | 3. C |
| 4. D | 5. D | 6. A |
| 7. A | 8. B | 9. B |

2. 1. 500 cans per hr

2.



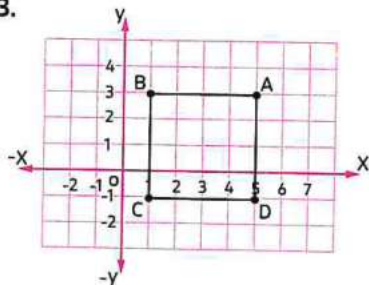
$$\text{The area of figure [1]} = \frac{1}{2} \times 2 \times 4 = 4 \text{ cm}^2$$

$$\text{The area of figure [2]} = 6 \times 4 = 24 \text{ cm}^2$$

$$\text{The area of figure [3]} = \frac{1}{2} \times 3 \times 4 = 6 \text{ cm}^2$$

$$\begin{aligned} \text{The area of the trapezium} \\ &= 4 + 24 + 6 = 34 \text{ cm}^2 \end{aligned}$$

3.



ABCD is a square

$$4. 10\% \text{ of } 10,000 \text{ L.E.} = 1,000 \text{ L.E.}$$

$$\begin{aligned} \text{The total amount} \\ &= 10,000 + 1,000 = 11,000 \text{ L.E.} \end{aligned}$$

$$5. \text{ The length of AB} = 4 \text{ length units}$$

Answers

6. The volume = $5 \times 4 \times 2 = 40 \text{ cm}^3$

7.
$$\begin{array}{r} \div 4 \\ \times \quad 12 \\ \hline 4 \quad 16 \end{array}$$

$x = 12 \div 4 = 3$

$x + 2 = 3 + 2 = 5$

5

Giza

1. 1. A 2. C 3. B
4. C 5. A 6. A
7. B 8. A 9. D

2. 1. a. 10 % of 240 L.E. = 24 L.E.

The price after discount
= $240 - 24 = 216 \text{ L.E.}$

b. $6 \div \frac{3}{5} = 6 \times \frac{5}{3} = 10$

2. a.

First number 5

Second number 5 5 5 5 5

each box = $30 \div 6 = 5$

The first number : 5

The second number = 5×5
= 25

b. The area = $\frac{1}{2} \times 10 \times 6 = 30 \text{ cm}^2$

3. Unit rate = $\frac{45}{3} = 15 \text{ L.E./Kg}$

The price = $2 \times 15 = 30 \text{ L.E.}$

4. a. The distance = 11 units

b. The surface area

= $[7 \times 7] + [4 \times \frac{1}{2} \times 7 \times 10]$
= $49 + 140 = 189 \text{ cm}^2$

5. 20 %

6. The volume = $10 \times 3 = 30 \text{ cm}^3$

7. a. 1:1 b. $\frac{1,000 \text{ m}}{1 \text{ km}}$

6

Alexandria

1. 1. B 2. C 3. C
4. D 5. C 6. C
7. B 8. C 9. A

2. 1. The area = $\frac{1}{2} \times 8 \times 6 = 24 \text{ cm}^2$

2. $\frac{12}{15} [\div 3] = \frac{4}{5}$

3. 1

4. a. 5 b. $\frac{5}{3}$ c. 125

5. 10 % of 8,000 = 800 L.E.

20 % = $2 \times 10 \%$

20 % of 8,000 L.E. = 2×800
= 1,600 L.E.

The price after discount

= $8,000 - 1,600 = 6,400 \text{ L.E.}$

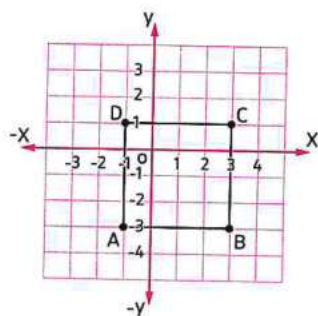
6. The surface area

= $2 \times [3 \times 4 + 4 \times 5 + 3 \times 5]$

= $2 \times [12 + 20 + 15]$

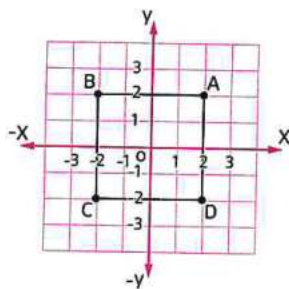
= $2 \times 47 = 94 \text{ cm}^2$

7.



ABCD is a Square

7.



ABCD is a Square

7**Alexandria**

1. 1. A 2. C 3. C
 4. A 5. A 6. C
 7. A 8. D 9. A

2. 1. The number of bottles
 $= 2 \div \frac{1}{4} = 2 \times \frac{4}{1} = 8$ bottles

2. The price = $12.5 \times 4 = 50$ pounds

3. Unit rate = $\frac{120}{10} = 12$ km/L

The number of kilometers
 $= 12 \times 3 = 36$ km

4. The volume = $20 \times 15 \times 10$
 $= 3,000 \text{ cm}^3$

5. 10% of 1,000 L.E. = 100 L.E.

The price after discount
 $= 1,000 - 100 = 900$ L.E.

6. The area = $\frac{1}{2} \times 6 \times 8 = 24 \text{ cm}^2$

8**El-Kalyoubia**

1. 1. B 2. B 3. A
 4. B 5. A 6. B
 7. D 8. C 9. D

2. 1. The share = $\frac{3}{7} \div 3 = \frac{3}{7} \times \frac{1}{3}$
 $= \frac{1}{7}$ piece of cake

2.

Red 3 3 3 3 3 3 3 3
 6 more

Yellow 3 3 3 3 3

Each box = $6 \div 2 = 3$

The total number of flowers
 $= 3 \times 12 = 36$ flowers

3. The rate of 1st machine

$$= \frac{250}{5} = 50 \text{ m/hr}$$

The rate of 2nd machine

$$= \frac{320}{8} = 40 \text{ m/hr}$$

The 1st machine is better
 because it produce more
 meters than the 2nd machine.

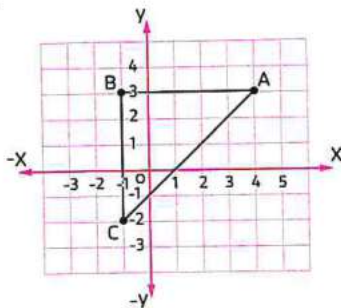
Answers

4. 10 % of 1,000 L.E. = 100 L.E.

The price after discount

$$= 1,000 - 100 = 900 \text{ L.E.}$$

5.



Right-angled triangle

6. The length of $\overline{BC} = \frac{15}{2} \times 5 = 6 \text{ cm}$

7. The Volume = $12 \times 8 \times 5$
 $= 480 \text{ cm}^3$

9

El-Sharkia

- | | | |
|---------|------|------|
| 1. 1. B | 2. D | 3. A |
| 4. A | 5. C | 6. D |
| 7. B | 8. A | 9. C |

2. 1.

Boys

7	7	7	7
---	---	---	---

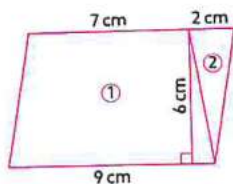
Girls

7	7	7
---	---	---

Each box = $28 \div 4 = 7$

The number of girls = 3×7
 $= 21 \text{ girls}$

2.



The area of figure ① = 9×6
 $= 54 \text{ cm}^2$

The area of figure ② = $\frac{1}{2} \times 2 \times 6$
 $= 6 \text{ cm}^2$

The area of trapezium = $54 - 6$
 $= 48 \text{ cm}^2$

3. The volume = $8 \times 5 \times 10$
 $= 400 \text{ cm}^3$

4. The length of $\overline{AB}$
 $= 3 + |-5| = 3 + 5$
 $= 8 \text{ length units}$

5. The piece length
 $= 875 \div 100 = 8.75 \text{ m}$

6.

$$\frac{3}{5} = \frac{21}{X}$$

$X = 5 \times 7 = 35$

7. 10 % of 300 = 30 L.E.

5 % of 300 = 15 L.E.

15 % = 10 % + 5 %

15 % of 300 L.E. = $30 + 15 = 45 \text{ L.E.}$

The price after discount
 $= 300 - 45 = 255 \text{ L.E.}$

10**El-Monofia**

1. 1. C 2. D 3. B
 4. C 5. A 6. B
 7. D 8. B 9. D

2. 1.

Boys

50	50	50
----	----	----

Girls

50	50	50	50	50
----	----	----	----	----

Each box = $250 \div 5 = 50$

The number of boys = 3×50
 = 150 boys

2. The surface area

$$= 2 \times [6 \times 5 + 6 \times 4 + 5 \times 4]$$

$$= 2 \times [30 + 24 + 20]$$

$$= 2 \times 74 = 148 \text{ cm}^2$$

3. 10 % of 20,000 = 2,000 L.E.

5 % of 20,000 = 1,000 L.E.

15 % = 10 % + 5 %

15 % of 20,000 L.E.

$$= 2,000 + 1,000 = 3,000 \text{ L.E.}$$

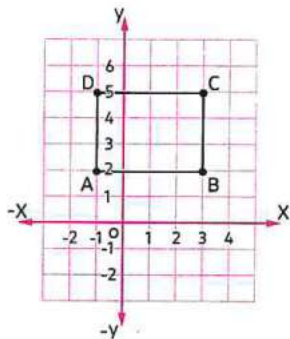
The selling price

$$= 20,000 - 3,000 = 17,000 \text{ L.E.}$$

4. The area = $\frac{1}{2} \times 10 \times 6 = 30 \text{ cm}^2$

5. The distance = $\frac{4}{5} \div 2 = \frac{4}{5} \times \frac{1}{2}$
 = $\frac{2}{5}$ kilometer

6.



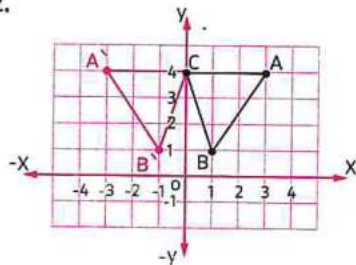
7. The unit rate = $\frac{7,200}{8}$
 = 900 bottles/hr

11**EL-Gharbia**

1. 1. C 2. A 3. C
 4. C 5. C 6. A
 7. D 8. B 9. C

2. 1. The area of parallelogram
 = $8 \times 3 = 24 \text{ cm}^2$
 The greater height = $24 \div 6$
 = 4 cm

2.



3. a. $\frac{2}{7} \times 5\frac{1}{4} = \frac{2}{7} \times \frac{21}{4} = \frac{3}{2} = 1\frac{1}{2}$

b. $5 \div 2\frac{1}{2} = 5 \div \frac{5}{2} = 5 \times \frac{2}{5} = 2$

c. $\frac{x}{12} = 36\%$

$$\frac{x}{12} = \frac{36}{100}$$

$$100x = 12 \times 36$$

$$100x = 432$$

$$x = \frac{432}{100} = 4.32$$

4. The production rate
 $= 480 \div 6 = 80$ bottles per hour

5. $10\% \times 10,000 = 1,000$ L.E.

5% of 10,000 = 500 L.E.

15% = 10% + 5%

15% of 10,000 = 1,000 + 500
 $= 1,500$ L.E.

The price after discount
 $= 10,000 - 1,500 = 8,500$ L.E.

6. The cost = 64.5×2.4
 $= 154.8$ L.E.

7. The area = $\frac{1}{2} \times 12 \times 16 = 96 \text{ cm}^2$

12

El-Dakahlia

1. 1. a. C b. A c. D

2. The surface area = $6 \times 5 \times 5$
 $= 150 \text{ cm}^2$

2. 1. a. C b. C c. C

2.

$$\frac{3}{5} = \frac{15}{x}$$

The greater number = $5 \times 5 = 25$

3. 1. a. C b. C c. A

2. The surface area
 $= 8 \times 8 + [4 \times \frac{1}{2} \times 8 \times 10]$
 $= 64 + 160 = 224 \text{ cm}^2$

4. 1. 10% of 300 L.E. = 30 L.E.

The price after discount
 $= 300 - 30 = 270$ L.E.

2. a. $12 \div \frac{1}{3} = 12 \times \frac{3}{1} = 36$

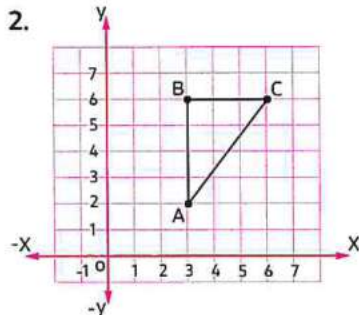
b. $1.6 \times 0.3 = 0.48$

5. 1.

$$\frac{50}{2} = \frac{\quad}{6}$$

What Amira paid = 50×3
 $= 150$ L.E.

2.



The length of $\overline{AB} = 4$ length units

13

Ismailia

1. 1. B 2. A 3. C

4. B 5. C 6. B

7. C 8. C 9. D

2. 10.

$$\frac{3}{2} = \frac{24}{\quad}$$

The number of girls = 2×8
 $= 16$ girls

The total number of students
 $= 24 + 16 = 40$ students

11. 10 % of 10,000 = 1,000 L.E.
 5 % of 10,000 = 500 L.E.
 15 % = 10 % + 5 %
 15 % of 10,000 L.E. = 1,500 L.E.
 The price after discount
 = 10,000 - 1,500 = 8,500 L.E.

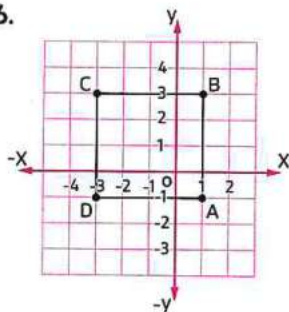
12. Unit rate = $\frac{490}{7} = 70$ pounds/kg

13. The number of bottles
 = $6 \div \frac{3}{4} = 6 \times \frac{4}{3} = 8$ bottles

14. The area = $\frac{1}{2} \times 6 \times 4 = 12 \text{ cm}^2$

15. The surface area
 = $2 \times [8 \times 5 + 5 \times 3 + 8 \times 3]$
 = $2 \times [40 + 15 + 24]$
 = $2 \times 79 = 158 \text{ cm}^2$

16.



ABCD is a square

14

Damietta

1. 1. B 2. C 3. B
 4. A 5. B 6. D
 7. C 8. B 9. C

2. 1. $\frac{9}{x} = 30\%$
 $\frac{9}{x} = \frac{30}{100}$
 $30 \times x = 9 \times 100$

$30x = 900$

$x = \frac{900}{30} = 30$

2.

$\frac{3}{5} = \frac{\quad}{15}$

The smaller number = $3 \times 3 = 9$

3. The production rate
 = $\frac{7,200}{8} = 900$ bottles of soda/hour

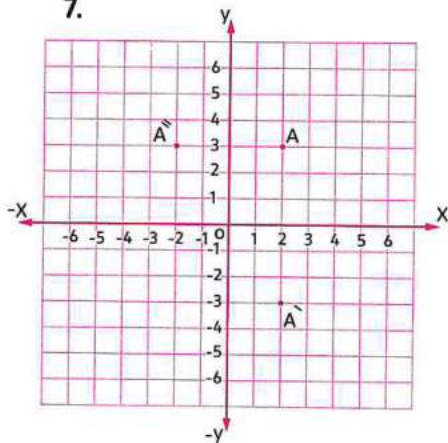
4. The number of lamps
 = $8 \div \frac{1}{5} = 8 \times \frac{5}{1} = 40$ lamps

5. Area of rectangle = 6×5
 = 30 cm^2
 Area of triangle = $\frac{1}{2} \times 4 \times 5$
 = 10 cm^2

Area of trapezium = $30 + 10$
 = 40 cm^2

6. The volume = $10 \times 4 \times 3$
 = 120 cm^3

7.



a. $\vec{A} [2, -3]$

b. $\vec{A} [-2, 3]$

15

EL-Fayoum

1. 1. A 2. C 3. C
4. D 5. D 6. C
7. C 8. B 9. C

2. 1. The volume = $10 \times 3 \times 4$
= 120 cm^3

2. Boys

20	20
----	----

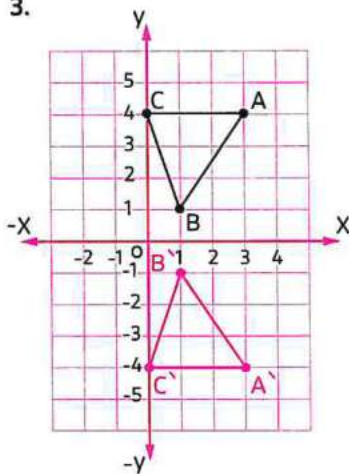
Girls

20	20	20
----	----	----

Each box = $60 \div 3 = 20$

The number of boys = 2×20
= 40 boys

3.



4. The number of bottles
= $6 \div \frac{2}{3} = 6 \times \frac{3}{2} = 9$ bottles

5. The percentage = $\frac{45}{50} \times 100\%$
= 90%

$$6. 1.2 \times 0.25 = 0.3$$

7.

$$\frac{x}{20} = \frac{9}{4}$$

$$x = 9 \times 5 = 45$$

16

Beni Suef

1. 1. A 2. B 3. A
4. A 5. B 6. C
7. C 8. A 9. C

2. 1. The area = $\frac{1}{2} \times 4 \times 6 = 12 \text{ cm}^2$

$$2. 10\% \text{ of } 6,000 = 600 \text{ L.E.}$$

$$20\% = 2 \times 10\%$$

$$20\% \text{ of } 6,000 \text{ L.E.} = 2 \times 600$$

= 1,200 L.E.

$$\text{The price after discount}$$

= $6,000 - 1,200 = 4,800 \text{ L.E.}$

$$3. \text{Unit rate of 1}^{\text{st}} \text{ machine}$$

= $\frac{480}{8} = 60 \text{ meters/hour}$

$$\text{Unit rate of 2}^{\text{nd}} \text{ machine}$$

= $\frac{355}{5} = 71 \text{ meters/hour}$

The 2nd machine is better.

$$4. x = \frac{3 \times 20}{1} = 60 \text{ L.E.}$$

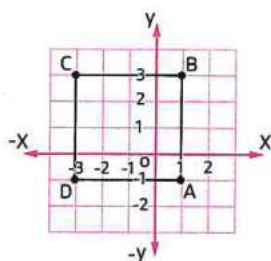
$$5. \text{The production rate}$$

= $\frac{550}{5} = 110 \text{ bottles/hour}$

$$6. \text{The surface area}$$

= $2 [4 \times 3 + 4 \times 2 + 3 \times 2]$
= $2 [12 + 8 + 6]$
= $2 \times 26 = 52 \text{ cm}^2$

7.



ABCD is a Square

17**Assiut**

1. 1. C 2. C 3. C
 4. B 5. A 6. C
 7. B 8. D 9. B

2.

Boys

5	5	5	5
---	---	---	---

Girls

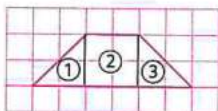
5	5	5
---	---	---

1. Each box = $20 \div 4 = 5$

The number of girls = 3×5
 = 15 girls

2. Unit rate = $\frac{12}{3} = 4$ km/hour

3.



The area of figure ①

$$= \frac{1}{2} \times 2 \times 2 = 2 \text{ square units}$$

The area of figure ②

$$= 2 \times 2 = 4 \text{ square units}$$

The area of figure ③

$$= \frac{1}{2} \times 2 \times 2 = 2 \text{ square units}$$

The area of the trapezoid

$$= 2 + 4 + 2 = 8 \text{ square units}$$

4. The first package

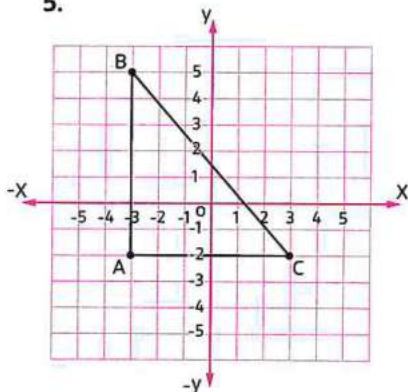
$$= \frac{50}{5} = 10 \text{ EGP / cup}$$

The second package

$$= \frac{68}{8} = 8.5 \text{ EGP/cup}$$

The best is the second package

5.



ABC is a right-angled triangle.

6.

The total	The part	percentage
800	160	20 %

7. The surface area

$$= 4 \times 4 + \left[4 \times \frac{1}{2} \times 4 \times 3 \right]$$

$$= 16 + 24 = 40 \text{ cm}^2$$

18**Qena**

1. 1. C 2. C 3. D
 4. C 5. D 6. A
 7. C 8. D 9. B

2. 1. The area of rectangle

$$= 5 \times 4$$

$$= 20 \text{ cm}^2$$

The area of

$$\text{triangle} = \frac{1}{2} \times 2 \times 5 = 5 \text{ cm}^2$$

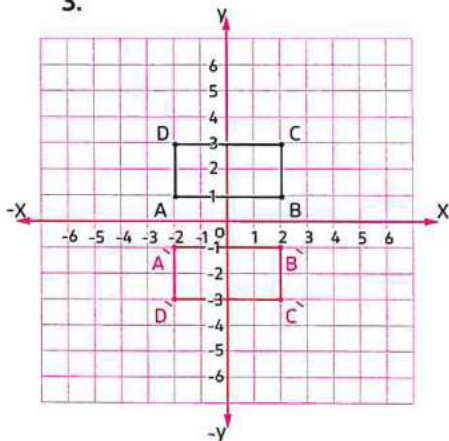
$$\text{The area of trapezium} = 20 + 5$$

$$= 25 \text{ cm}^2$$

2. a. $2.5 \times 3.7 = 9.25$

b. $4.8 \div 0.06 = 80$

3.



4. The surface area = $6 \times 3 \times 3$

$$= 54 \text{ cm}^2$$

5.

$$\frac{3}{4} = \frac{21}{\dots}$$

The greater number = $4 \times 7 = 28$

6. The surface area

$$= 6 \times 6 + \left[4 \times \frac{1}{2} \times 6 \times 4 \right]$$

$$= 36 + 48 = 84 \text{ cm}^2$$

7. a. $x = 240$

$y = 10\%$

b. $\frac{3 \text{ km}}{1 \text{ hr}} \times \frac{1,000 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ hr}}{60 \text{ min}}$

$$= 50 \text{ m/min}$$

19

Aswan

1. 1. A 2. B 3. C
4. A 5. B 6. A
7. C 8. A 9. C

2. 10. The volume = $3 \times 3 \times 2 = 18 \text{ cm}^3$

11. The surface area = $6 \times 20 \times 20$

$$= 2,400 \text{ cm}^2$$

12. The number of packages

$$= 2 \div \frac{1}{8} = 2 \times \frac{8}{1} = 16 \text{ packages}$$

13. The percentage = $\frac{5}{10} \times 100\%$

$$= 50\%$$

14.

$$\frac{2}{12} = \frac{\dots}{24}$$

The number of cups = 2×2

$$= 4 \text{ cups}$$

15.

Boys

5	5	5	5	5
---	---	---	---	---

Girls

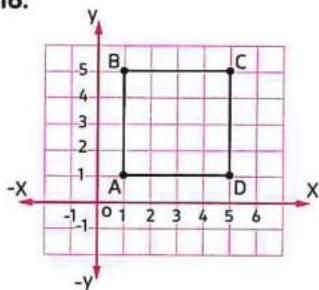
5	5	5	5
---	---	---	---

Each box = $25 \div 5 = 5$

The number of girls = 4×5

$$= 20 \text{ girls}$$

16.



ABCD is a square

20**New Valley**

1. 1. B 2. C 3. C
 4. A 5. A 6. C
 7. C 8. B 9. B

2. 10. The volume = $5 \times 5 \times 5$
 $= 125 \text{ cm}^3$

11. The area = $\frac{1}{2} \times 8 \times 6 = 24 \text{ cm}^2$

12. The daily rate = $\frac{175}{7}$
 $= 25 \text{ pages/day}$

13. 10 % of 24,000 L.E. = 2,400 L.E.

5 % of 24,000 L.E. = 1,200 L.E.

25 % = $2 \times 10 \% + 5 \%$

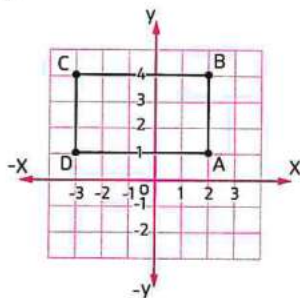
Total discount = $2 \times 2,400$
 $+ 1,200 = 6,000 \text{ L.E.}$

The price after discount
 $= 24,000 - 6,000 = 18,000 \text{ L.E.}$

14. $\frac{2}{3} \div \frac{4}{9} = \frac{2}{3} \times \frac{9}{4} = \frac{3}{2} = 1\frac{1}{2}$

15. the volume = $12 \times 6 \times 3$
 $= 216 \text{ cm}^3$

16.



ABCD is a rectangle

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



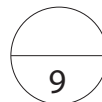
حمل الآن

مجانا وحصريا

امتحانات رقم (2)

الترم الثاني





1 Choose the correct answer:

- a The reciprocal of 5 is ($1, \frac{1}{5}, 15, 5$)
- b If the water tap is leaking 420 liters of water in one hour, then the rate of leaking
= L/min. (420 , 7 , 70 , 42)
- c The ratio between the perimeter of an equilateral triangle
and its side length = (1:4 , 4:1 , 1:3 , 3:1)
- d 10% of = 27 (540 , 270 , 10 , 2.7)
- e Which point of the following lies in the 4th quadrant
[(-2 , 3) , (-4 , -3) , (5 , -1) , (1 , 1)]
- f A parallelogram which all sides are equal in length is called a
(square , rectangle , rhombus , trapezium)
- g The ratio between two numbers is 2 : 5. If the first number became 8,
then the second number will be (8 , 10 , 15 , 20)
- h $\frac{2}{3} \div \frac{1}{5} = \dots\dots\dots$ ($\frac{2}{3} \times 5, \frac{3}{2} \times 5, \frac{3}{4} \times \frac{1}{5}, \frac{7}{3} \times \frac{1}{5}$)
- i A cube with a surface area of 96 cm², then the edge length is cm.
(4 , 3 , 27 , 16)

2 Answer each of the following:



- a Complete the following ratio table:

1	2		
3		9	18

Answer:

.....

- b** A boy walks 15 km in 2 hours and 30 minutes. Calculate his average speed in meters per minute.

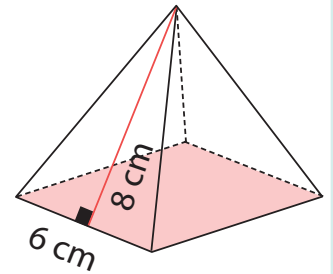
Answer:

- c** A parallelogram has an area of 84 cm^2 , and its base length is 12 cm. Calculate its corresponding height.

Answer:

- d** Find the surface area of the opposite square pyramid.

Answer:



- e** Write three ratios that equivalent to 5 : 30

Answer:

- f** Soha distributed 0.35 kg into some bags. If the mass of each bag is 0.01 kg, how many bags are needed?

Answer:

- g** An employee saves 2,700 L.E. monthly, if his monthly income is L.E. 6,000, find the percentage of what he saves monthly.

Answer:

1 Choose the correct answer:

- a If the volume of a cuboid is 280 cm^3 , and its base area is 70 cm^2 , then its height is cm. (40, 7, 4, 40)
- b Hany spends L.E. 120 in 4 days. What's the rate of what he spends per day? (L.E. 50 per day, L.E. 30 per day, L.E. 15 per day, L.E. 60 per day)
- c If $x : 15 = 1 : 3$, then $x + 3 =$ (5, 8, 9, 11)
- d If a car covers 240 km in 3 hours, then its speed is km/hr. (70, 80, 90, 110)
- e The distance between -6 and 5 on the number line is unit(s). (1, -1, 11, 5)
- f The area of a triangle = ($\frac{1}{2} \times b \times h$, $b \times h$, $W \times L$, $\frac{1}{4} b \times h$)
- g 35% of 160 = (56, 5.6, 0.56, 560)
- h A carpenter needs 40 m^2 to make 10 tables, then the rate of used wood = $\text{m}^2 / \text{table}$ (2, 3, 4, 300)
- i Any number multiplied by its reciprocal equals (0, 1, the same number, twice the number)

2 Answer each of the following:

- a Which is greater in area: a square whose side length is 6 cm or a rectangle with dimensions of 9 cm and 3 cm?

Answer:

.....

.....

- b If a speed of a car is 90 km per hour, what is the speed in cm per sec?

Answer:

.....

- c The volume of a cuboid is 810 cm^3 , and its height is 10 cm. Find its base area.

Answer:

.....

- d If the ratio between number of boys and girls in a class is 4 : 5 and the number of girls is 20 girls, find the number of boys.

Answer:

.....

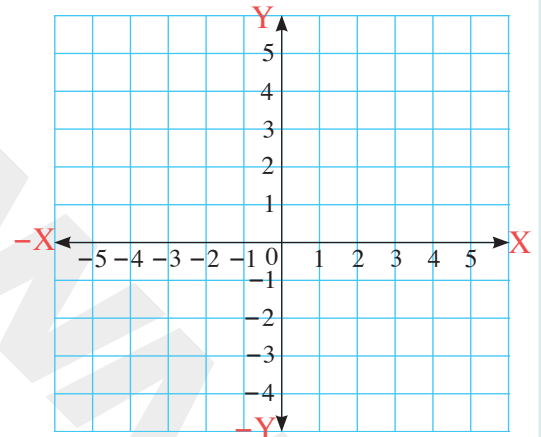
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- e Ali bought a car for L.E. 240,000, he paid 30% of its price. How much money did he pay?

Answer:

.....

- f Use the coordinate plane to plot the points $(-3, 4)$, $(4, 4)$ and $(4, -4)$ to draw a triangle, then write the type of the triangle according to the measure of its angles.



Answer:

.....

.....

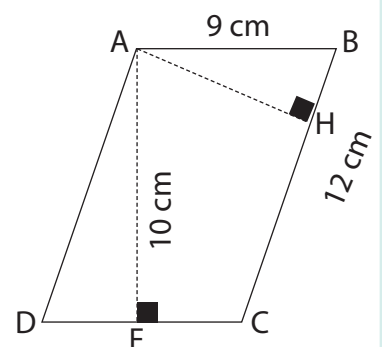
- g According the opposite shape:

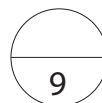
Find the length of $\overline{AH}$.

Answer:

.....

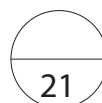
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1 Choose the correct answer:

- a The number of heights of a right-angled triangle is (0, 1, 2, 3)
- b The formula for the area of one face of a cube is ($6S^2$, $4S^2$, $6S$, S^2)
- c The area of a parallelogram is 54 cm^2 , and its base length is 9 cm,
then its corresponding height = cm. (54, 6, 9, 18)
- d The two points (3, -7) and (3, -3) lie on the same
(horizontal line, vertical line, inclined line, otherwise)
- e The image of the point (0, 5) by reflection on Y-axis is
[(5, 0), (0, -5), (5, -5), itself]
- f If $3 : 5 = 12 : 4x$, then $x =$ (20, 24, 5, 10)
- g $1 - \frac{3}{4} =$ % (25, 2.5, $\frac{1}{4}$, 0.25)
- h A factory produces 5,400 cans of soda in 9 hours, then the rate of production
= cans/hour. (6, 60, 600, 6,000)
- i $45 \div 0.9 =$ $\div 9$ (0.45, 450, 45, 4.5)



2 Answer each of the following:

- a A dinner bill is L.E. 600 if there's a 15% tax. Calculate the bill after adding the tax.

Answer:

.....

.....

- b A tank in the shape of a cube, its edge length is 10 cm. Find the area of one face and its surface area.

Answer:

.....

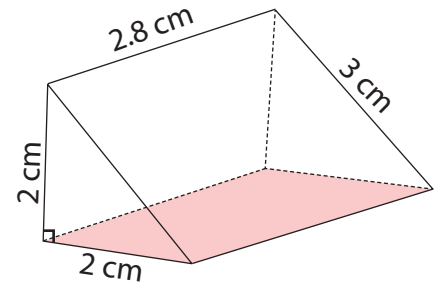
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- c Calculate the surface area of the opposite prism.

Answer:

.....

.....



- d Sara drove her car at a speed of 96 km/hr. Calculate the speed in m/min.

Answer:

.....

.....

- e A factory produces 7,200 bottles of soda in 8 hours. What is the rate of production?

Answer:

.....

- f Ahmed has $\frac{5}{7}$ meters of pipe, and he wants to divide it into 15 pieces of equal length to make models of small robots. What is the length of each piece of pipe that he can use for each robot?

Answer:

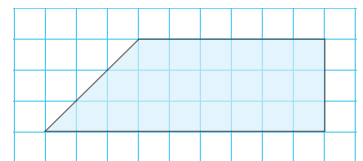
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- g Calculate the area of the opposite trapezium.

Answer:

.....

.....



1 Choose the correct answer:

- a The volume of a cuboid whose dimensions are 6 cm, 4 cm and 1 cm equals cm^3 . (10 , 12 , 48 , 24)
- b The two points (3 , -7) and (-6 , -7) lie on the same
(horizontal line , vertical line , inclined line , otherwise)
- c A parallelogram which has a right angle is called a
(square , rectangle , rhombus , trapezium)
- d The ratio between the perimeter of a square and its side length =
(1 : 3 , 3 : 1 , 1 : 4 , 4 : 1)
- e = $\frac{4}{7} \times \frac{5}{4}$ ($\frac{7}{4} \div \frac{5}{4}$, $\frac{4}{7} \div \frac{4}{5}$, $\frac{7}{4} - \frac{5}{4}$, $\frac{1}{7} \times \frac{1}{5}$)
- f $5.2 \times 0.3 =$ (0.156 , 1.56 , 15.6 , 156)
- g 60% of = 360 (0.6 , 6 , 60 , 600)
- h 2.3 tons 2,300 kg (> , < , = , otherwise)
- i Which of the following lies in the 2nd quadrant? [(1 , -1) , (0 , -1) , (-1 , 1) , (1 , -1)]

2 Answer each of the following:

- a Ramy has 4 liters of juice, he divided them into small bottles of $\frac{2}{3}$ liter each,
how many bottles will he get?

Answer:

.....

- b Which of the following ratios are equivalent or not equivalent?

1 $\frac{18}{27}$, $\frac{20}{24}$

2 $\frac{9}{15}$, $\frac{15}{25}$

Answer:

.....

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c Which is greater in area?

A triangle whose base length is 2.4 dm and its corresponding height is 5 cm,
or a triangle whose base length is 12 cm and its corresponding height is 8 cm.

Answer:

.....

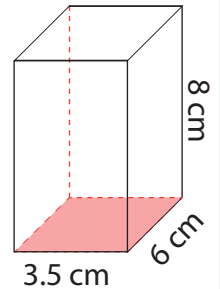
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d Find the volume of the opposite solid:

Answer:

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.....



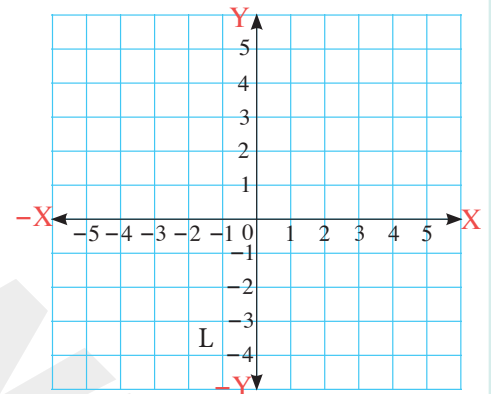
e Plot and join the points, then identify the shape:

L (-1 , -3) , M (3 , -3) , N (3 , 1) , O (-1 , 1)

Answer:

.....

.....



f Find the area of the rhombus whose perimeter is 20 cm and its height is 3.4 cm.

Answer:

.....

.....

g Find the image of the point (-4 , -1) by reflection across the X-axis, then find the distance between the point and the image.

Answer:

.....

.....

1 Choose the correct answer:

- a A triangle with base length of 10 cm, and its corresponding height is 6 cm, then its area = cm^2 . (30 , 15 , 45 , 60)
- b The ratio between two numbers is 1 : 4 . If the first number became 5, then the second number will be (42 , 14 , 20 , 16)
- c Which point of the following can be a vertex of a right-angled triangle if the other vertices are (0 , 8) and (4 , 0)? [(0 , 1) , (0 , -1) , (0 , 0) , (1 , 1)]
- d In a restaurant, there's 10% added to each meal as a service. If the price of a meal is 240 L.E., then the price of the meal after adding the service is L.E. (248 , 264 , 24 , 258)
- e The image of the point (2 , -9) by reflection across Y-axis is [(2 , 9) , (-9 , 2) , (-2 , -9) , (-2 , 9)]
- f The distance between the points (-5,6) and (-5,2) = length units. (-5 , 4 , 8 , 0)
- g $\frac{3}{7} = \frac{15}{x}$, then $x =$ (3 , 21 , 15 , 35)
- h If we doubled one of the dimensions of a cuboid, then the ratio between the volume of the original cuboid and the new cuboid is (1 : 2 , 1 : 3 , 1 : 4 , 1 : 8)
- i If the area of a parallelogram is 98 cm^2 , and its base length is 7 cm, then its corresponding height = cm. (14 , 6 , 7 , 28)

2 Answer each of the following:

- a A rectangular prism has dimensions of 7 cm, 5 cm, and 3 cm. Find its surface area.

Answer:

.....

.....

- b If you are at $(-1, 0)$, move 5 units left and 3 units downward. Where do you land?

Answer:

.....

.....

- c A merchant sold 30 kilograms of bananas at a price of 17.5 pounds per kilogram. Calculate the price of the quantity of bananas.

Answer:

.....

.....

- d Find the value of: 30% of 850

Answer:

.....

.....

- e An animal runs at a speed of 42 km/hr. Find its speed in meters per minute.

Answer:

.....

.....

- f Find the values of y if $y < 0$, and the distance between $(-2, y)$ and $(-2, 5)$ is 7 units.

Answer:

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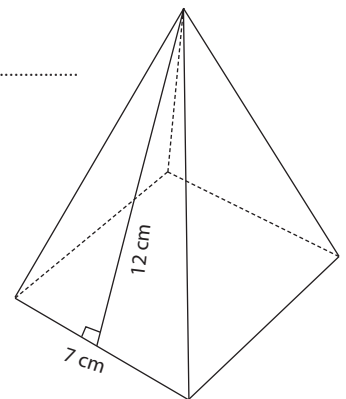
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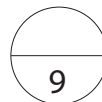
- g Find the surface area of the following square pyramid:

Answer:

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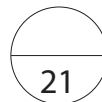




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- b If the water tap is leaking 420 liters of water in one hour, then the rate of leaking = L/min. (420, 7, 70, 42)
- c The ratio between the perimeter of an equilateral triangle and its side length = (1:4, 4:1, 1:3, 3:1)
- d 10% of = 27 (540, 270, 10, 2.7)
- e Which point of the following lies in the 4th quadrant
[(-2, 3), (-4, -3), (5, -1), (1, 1)]
- f A parallelogram which all sides are equal in length is called a
(square, rectangle, rhombus, trapezium)
- g The ratio between two numbers is 2 : 5. If the first number became 8, then the second number will be (8, 10, 15, 20)
- h $\frac{2}{3} \div \frac{1}{5} = \dots\dots\dots$ ($\frac{2}{3} \times 5$, $\frac{3}{2} \times 5$, $\frac{3}{4} \times \frac{1}{5}$, $\frac{7}{3} \times \frac{1}{5}$)
- i A cube with a surface area of 96 cm², then the edge length is cm. (4, 3, 27, 16)

2 Answer each of the following:



- a Complete the following ratio table:

1	2		
3		9	18

Answer:

1	2	3	6
3	6	9	18

- b** A boy walks 15 km in 2 hours and 30 minutes. Calculate his average speed in meters per minute.

Answer:

$$15 \text{ km} = 15,000 \text{ m}$$

$$2 \text{ hours and } 30 \text{ minutes} = 150 \text{ minutes}$$

$$\text{The average} = 15,000 \div 150 = 100 \text{ meters per minute}$$

- c** A parallelogram has an area of 84 cm^2 , and its base length is 12 cm. Calculate its corresponding height.

Answer:

$$\text{The corresponding height} = \frac{\text{the area}}{\text{base length}} = \frac{84}{12} = 7 \text{ cm}$$

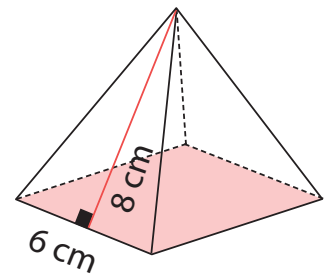
- d** Find the surface area of the opposite square pyramid.

Answer:

$$\begin{aligned} \blacktriangleright \text{The area of the base} &= \text{side length} \times \text{itself} \\ &= 6 \times 6 = 36 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \blacktriangleright \text{The area of triangular faces} &= 4 \times \left(\frac{1}{2} \times 6 \times 8 \right) \\ &= 96 \text{ cm}^2 \end{aligned}$$

$$\blacktriangleright \text{The surface area of the square pyramid} = 36 + 96 = 132 \text{ cm}^2$$



- e** Write three ratios that equivalent to 5 : 30

Answer:

$$1 : 6, 10 : 60, 50 : 300$$

- f** Soha distributed 0.35 kg into some bags. If the mass of each bag is 0.01 kg, how many bags are needed?

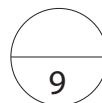
Answer:

$$\text{Number of bags} = 0.35 \div 0.01 = 35 \div 1 = 35 \text{ bags}$$

- g** An employee saves 2,700 L.E. monthly, if his monthly income is L.E. 6,000, find the percentage of what he saves monthly.

Answer:

$$\text{The percentage of what he saves monthly} = \frac{2,700}{6,000} \times 100\% = 45\%$$



1 Choose the correct answer:

- a If the volume of a cuboid is 280 cm^3 , and its base area is 70 cm^2 , then its height is cm. (40, 7, 4, 40)
- b Hany spends L.E. 120 in 4 days. What's the rate of what he spends per day? (L.E. 50 per day, L.E. 30 per day, L.E. 15 per day, L.E. 60 per day)
- c If $x : 15 = 1 : 3$, then $x + 3 =$ (5, 8, 9, 11)
- d If a car covers 240 km in 3 hours, then its speed is km/hr. (70, 80, 90, 110)
- e The distance between -6 and 5 on the number line is unit(s). (1, -1, 11, 5)
- f The area of a triangle = ($\frac{1}{2} \times b \times h$, $b \times h$, $W \times L$, $\frac{1}{4} b \times h$)
- g 35% of 160 = (56, 5.6, 0.56, 560)
- h A carpenter needs 40 m^2 to make 10 tables, then the rate of used wood = $\text{m}^2 / \text{table}$ (2, 3, 4, 300)
- i Any number multiplied by its reciprocal equals (0, 1, the same number, twice the number)

2 Answer each of the following:



- a Which is greater in area: a square whose side length is 6 cm or a rectangle with dimensions of 9 cm and 3 cm?

Answer:

- The area of the square = side length $\times$ itself
 $= 6 \times 6 = 36 \text{ cm}^2$
- The area of the rectangle = length $\times$ width
 $= 9 \times 3 = 27 \text{ cm}^2$
- The area of the square is greater.

- b If a speed of a car is 90 km per hour, what is the speed in cm per sec?

Answer:

$$\text{The speed} = \frac{90 \text{ km}}{1 \text{ hour}} \times \frac{100,000 \text{ cm}}{1 \text{ km}} \times \frac{1 \text{ hour}}{3,600 \text{ sec.}} = 2,500 \text{ cm per sec.}$$

- c The volume of a cuboid is 810 cm^3 , and its height is 10 cm. Find its base area.

Answer:

$$\text{Base area} = \frac{\text{Volume}}{\text{Height}} = \frac{810}{10} = 81 \text{ cm}^2$$

- d If the ratio between number of boys and girls in a class is 4 : 5 and the number of girls is 20 girls, find the number of boys.

Answer:

Boys : Girls

4 : 5

? : 20

$$\text{The number of boys} = \frac{4 \times 20}{5} = 16 \text{ boys}$$

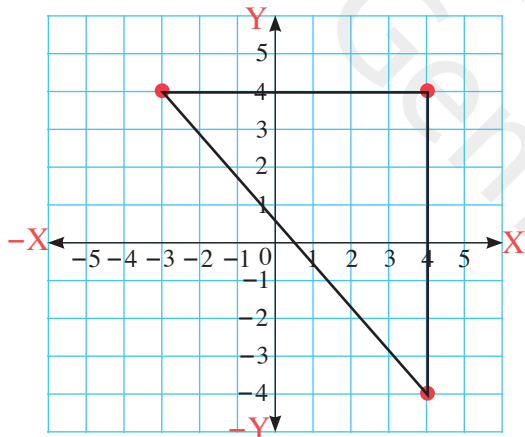
- e Ali bought a car for L.E. 240,000, he paid 30% of its price. How much money did he pay?

Answer:

$$\text{What he paid} = \frac{30}{100} \times 240,000 = \text{L.E. } 72,000$$

- f Use the coordinate plane to plot the points $(-3, 4)$, $(4, 4)$ and $(4, -4)$ to draw a triangle, then write the type of the triangle according to the measure of its angles.

Answer:



Right-angled triangle

- g According to the opposite shape:

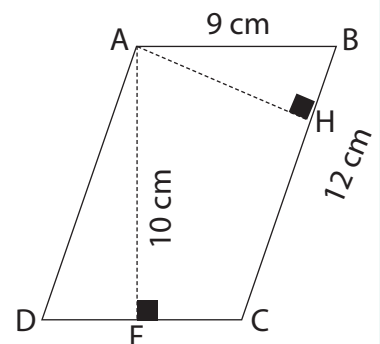
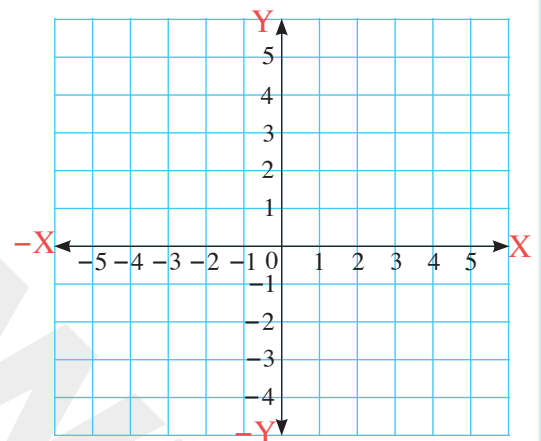
Find the length of $\overline{AH}$.

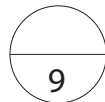
Answer:

The area of the parallelogram =

$$\text{Base length} \times \text{corresponding height} = 9 \times 10 = 90 \text{ cm}^2$$

$$\text{The length of } \overline{AH} = \frac{90}{12} = 7.5 \text{ cm}$$

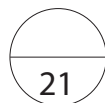




1 Choose the correct answer:

- a The number of heights of a right-angled triangle is (0, 1, 2, **3**)
- b The formula for the area of one face of a cube is ($6S^2$, $4S^2$, $6S$, **S^2**)
- c The area of a parallelogram is 54 cm^2 , and its base length is 9 cm,
then its corresponding height = cm. (54, **6**, 9, 18)
- d The two points (3, -7) and (3, -3) lie on the same
(horizontal line, **vertical line**, inclined line, otherwise)
- e The image of the point (0, 5) by reflection on Y-axis is
[(5, 0), (0, -5), (5, -5), **itself**]
- f If $3 : 5 = 12 : 4x$, then $x =$ (20, 24, **5**, 10)
- g $1 - \frac{3}{4} =$ % (**25**, 2.5, $\frac{1}{4}$, 0.25)
- h A factory produces 5,400 cans of soda in 9 hours, then the rate of production
= cans/hour. (6, 60, **600**, 6,000)
- i $45 \div 0.9 =$ $\div 9$ (0.45, **450**, 45, 4.5)

2 Answer each of the following:



- a A dinner bill is L.E. 600 if there's a 15% tax. Calculate the bill after adding the tax.

Answer:

$$\text{The tax} = \frac{15}{100} \times 600 = \text{L.E. } 90$$

$$\text{The bill after adding the tax} = 600 + 90 = \text{L.E. } 690$$

- b A tank in the shape of a cube, its edge length is 10 cm. Find the area of one face and its surface area.

Answer:

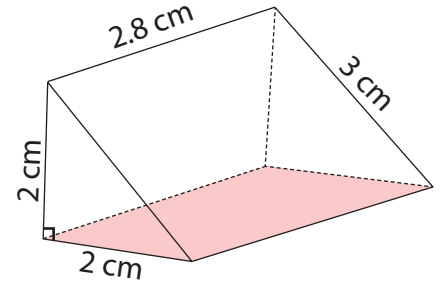
$$\text{The area of one face} = S \times S = 10 \times 10 = 100 \text{ cm}^2$$

$$\text{The surface area} = 6 \times S^2 = 6 \times (100) = 600 \text{ cm}^2$$

- c Calculate the surface area of the opposite prism.

Answer:

- ▶ The area of 2 triangular bases = $2 \times \frac{1}{2} \times 2 \times 2 = 4 \text{ cm}^2$
- ▶ The area of 1st rectangle = $2.8 \times 3 = 8.4 \text{ cm}^2$
- ▶ The area of 2nd rectangle = $2.8 \times 2 = 5.6 \text{ cm}^2$
- ▶ The area of 3rd rectangle = $2.8 \times 2 = 5.6 \text{ cm}^2$
- ▶ The surface area of a prism = $4 + 8.4 + 5.6 + 5.6 = 23.6 \text{ cm}^2$



- d Sara drove her car at a speed of 96 km/hr. Calculate the speed in m/min.

Answer:

$$\text{The speed} = \frac{96 \text{ km}}{1 \text{ hour}} \times \frac{1,000 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ hour}}{60 \text{ min.}} = 1,600 \text{ m/min.}$$

- e A factory produces 7,200 bottles of soda in 8 hours. What is the rate of production?

Answer:

$$\text{The rate} = \frac{7,200}{8} = 900 \text{ bottles/hour}$$

- f Ahmed has $\frac{5}{7}$ meters of pipe, and he wants to divide it into 15 pieces of equal length to make models of small robots. What is the length of each piece of pipe that he can use for each robot?

Answer:

$$\text{The length of each piece} = \frac{5}{7} \div 15 = \frac{5}{7} \times \frac{1}{15} = \frac{1}{21} \text{ m}$$

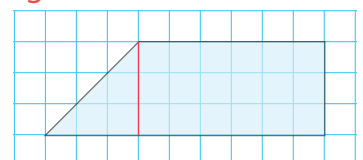
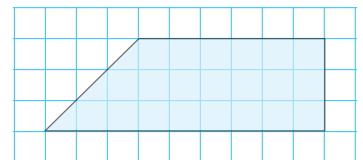
- g Calculate the area of the opposite trapezium.

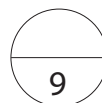
Answer:

$$\begin{aligned} \text{▶ The area of the rectangle} &= \text{length} \times \text{width} \\ &= 6 \times 3 = 18 \text{ square units} \end{aligned}$$

$$\begin{aligned} \text{▶ The area of the triangle} &= \frac{1}{2} \times \text{base length} \times \text{corresponding height} \\ &= \frac{1}{2} \times 3 \times 3 = 4.5 \text{ square units} \end{aligned}$$

$$\text{▶ The area of the trapezium} = 18 + 4.5 = 22.5 \text{ square units}$$





1 Choose the correct answer:

- a The volume of a cuboid whose dimensions are 6 cm, 4 cm and 1 cm equals cm^3 . (10, 12, 48, **24**)
- b The two points (3, -7) and (-6, -7) lie on the same
(**horizontal line** , vertical line , inclined line , otherwise)
- c A parallelogram which has a right angle is called a
(square , **rectangle** , rhombus , trapezium)
- d The ratio between the perimeter of a square and its side length =
(1 : 3 , 3 : 1 , 1 : 4 , **4 : 1**)
- e = $\frac{4}{7} \times \frac{5}{4}$ ($\frac{7}{4} \div \frac{5}{4}$, **$\frac{4}{7} \div \frac{4}{5}$** , $\frac{7}{4} - \frac{5}{4}$, $\frac{1}{7} \times \frac{1}{5}$)
- f $5.2 \times 0.3 =$ (0.156 , **1.56** , 15.6 , 156)
- g 60% of = 360 (0.6 , 6 , 60 , **600**)
- h 2.3 tons 2,300 kg (> , < , = , otherwise)
- i Which of the following lies in the 2nd quadrant? [(1, -1) , (0, -1) , **(-1, 1)** , (1, -1)]

2 Answer each of the following:



- a Ramy has 4 liters of juice, he divided them into small bottles of $\frac{2}{3}$ liter each,
how many bottles will he get?

Answer:

$$\text{The number of bottles} = 4 \div \frac{2}{3} = 4 \times \frac{3}{2} = 6 \text{ bottles}$$

- b Which of the following ratios are equivalent or not equivalent?

1 $\frac{18}{27}, \frac{20}{24}$

2 $\frac{9}{15}, \frac{15}{25}$

Answer:

1 $18 \times 24 = 432$
 $27 \times 20 = 540$
Not equivalent

2 $9 \times 25 = 225$
 $15 \times 15 = 225$
Equivalent

c Which is greater in area?

A triangle whose base length is 2.4 dm and its corresponding height is 5 cm, or a triangle whose base length is 12 cm and its corresponding height is 8 cm.

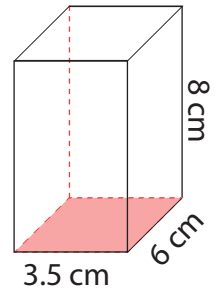
Answer:

- ▶ The area of the first triangle $= \frac{1}{2} \times \text{base length} \times \text{corresponding height}$
 $= \frac{1}{2} \times 24 \times 5 = 60 \text{ cm}^2$
- ▶ The area of the second triangle $= \frac{1}{2} \times \text{base length} \times \text{corresponding height}$
 $= \frac{1}{2} \times 12 \times 8 = 48 \text{ cm}^2$
- ▶ The first triangle has the greater area.

d Find the volume of the opposite solid:

Answer:

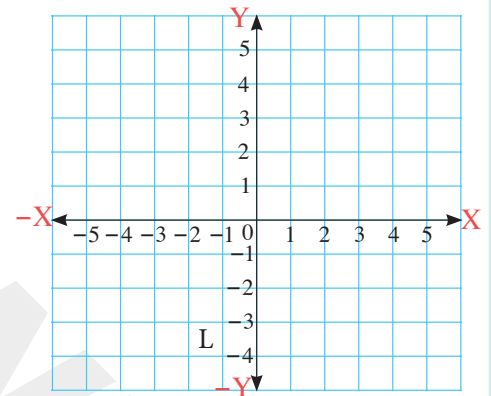
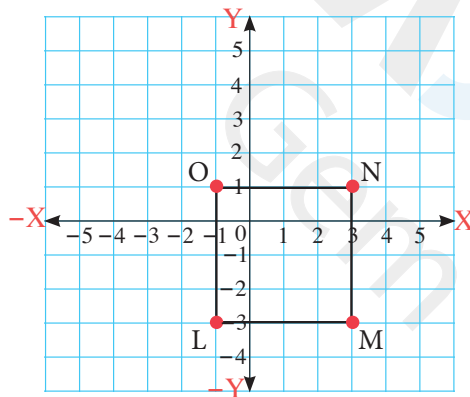
$$\begin{aligned}\text{The volume} &= \text{length} \times \text{width} \times \text{height} \\ &= 6 \times 3.5 \times 8 = 168 \text{ cm}^3\end{aligned}$$



e Plot and join the points, then identify the shape:

L (-1, -3), M (3, -3), N (3, 1), O (-1, 1)

Answer:



The shape is a square.

f Find the area of the rhombus whose perimeter is 20 cm and its height is 3.4 cm.

Answer:

$$\text{The side length of the rhombus} = 20 \div 4 = 5 \text{ cm}$$

$$\text{The area} = 5 \times 3.4 = 17 \text{ cm}^2$$

g Find the image of the point (-4, -1) by reflection across the X-axis, then find the distance between the point and the image.

Answer:

The image of the point (-4, -1) is (-4, 1).

The distance between them $= 1 + 1 = 2$ units.

1 Choose the correct answer:

- a A triangle with base length of 10 cm, and its corresponding height is 6 cm, then its area = cm^2 . (30 , 15 , 45 , 60)
- b The ratio between two numbers is 1 : 4 . If the first number became 5, then the second number will be (42 , 14 , 20 , 16)
- c Which point of the following can be a vertex of a right-angled triangle if the other vertices are (0 , 8) and (4 , 0)? [(0 , 1) , (0 , -1) , (0 , 0) , (1 , 1)]
- d In a restaurant, there's 10% added to each meal as a service. If the price of a meal is 240 L.E., then the price of the meal after adding the service is L.E. (248 , 264 , 24 , 258)
- e The image of the point (2 , -9) by reflection across Y-axis is [(2 , 9) , (-9 , 2) , (-2 , -9) , (-2 , 9)]
- f The distance between the points (-5,6) and (-5,2) = length units. (-5 , 4 , 8 , 0)
- g $\frac{3}{7} = \frac{15}{x}$, then $x =$ (3 , 21 , 15 , 35)
- h If we doubled one of the dimensions of a cuboid, then the ratio between the volume of the original cuboid and the new cuboid is (1 : 2 , 1 : 3 , 1 : 4 , 1 : 8)
- i If the area of a parallelogram is 98 cm^2 , and its base length is 7 cm, then its corresponding height = cm. (14 , 6 , 7 , 28)

2 Answer each of the following:

- a A rectangular prism has dimensions of 7 cm, 5 cm, and 3 cm. Find its surface area.

Answer:

$$\begin{aligned}
 \text{The surface area} &= (2 \times L \times W) + (2 \times L \times H) + (2 \times W \times H) \\
 &= (2 \times 7 \times 5) + (2 \times 7 \times 3) + (2 \times 5 \times 3) \\
 &= 70 + 42 + 30 = 142 \text{ cm}^2
 \end{aligned}$$

- b** If you are at $(-1, 0)$, move 5 units left and 3 units downward. **Where do you land?**

Answer:

At point $(-6, -3)$

- c** A merchant sold 30 kilograms of bananas at a price of 17.5 pounds per kilogram.
Calculate the price of the quantity of bananas.

Answer:

The price of the quantity of bananas $= 30 \times 17.5 = 525$ pounds

- d** Find the value of: 30% of 850

Answer:

$$30\% \text{ of } 850 = \frac{30}{100} \times 850 = 255$$

- e** An animal runs at a speed of 42 km/hr. **Find its speed in meters per minute.**

Answer:

$$\text{The speed} = \frac{42 \text{ km}}{1 \text{ hour}} \times \frac{1,000 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ hour}}{60 \text{ min.}} = 700 \text{ meters per minute}$$

- f** Find the values of y if $y < 0$, and the distance between $(-2, y)$ and $(-2, 5)$ is 7 units.

Answer:

The possible values of y are -2 and 12

but $y < 0$, then the correct answer is -2

- g** Find the surface area of the following square pyramid:

Answer:

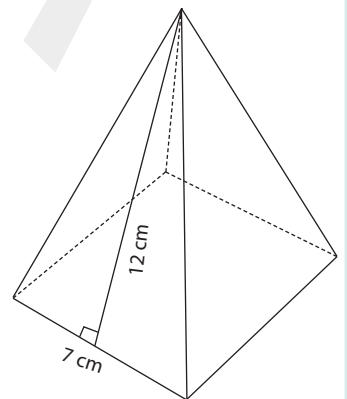
► The area of the base = side length $\times$ itself

$$= 7 \times 7 = 49 \text{ cm}^2$$

► The area of the triangular faces $= 4 \times \left(\frac{1}{2} \times 7 \times 12 \right)$

$$= 168 \text{ cm}^2$$

► The surface area of the square pyramid $= 49 + 168 = 217 \text{ cm}^2$



حمل الآن

مجاناً وحصرياً

امتحانات رقم (3)

الترم الثاني

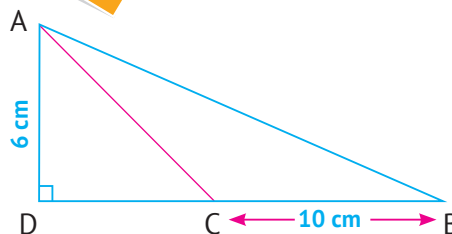


Model

1

Q1: Choose the correct answer:

- 1 The area of the opposite triangle ABC is cm^2 . (30 or 60 or 16 or 8)

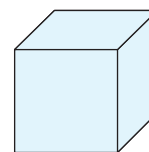


- 2 30% of 90 kg = kg. (27 or 9 or 27,000 or 18)

- 3 Which of the following ratios is equivalent to 5 : 6?
(20 : 24 or 24 : 20 or 6 : 5 or 24 : 12)

- 4 The distance between the two points (2 , 6) and (2 , -6) is
length units. (4 or 12 or 5 or -12)

- 5 If the length of each edge in the opposite cube is 3cm, the surface area of 4 faces only is
(54cm or 36cm² or 36cm or 54cm²)



- 6 50 % of 80 80% of 50 ($>$ or $<$ or $=$ or otherwise)

- 7 $\frac{25}{9} \div \frac{25}{5} = \dots\dots\dots$. ($\frac{5}{9}$ or $\frac{9}{5}$ or $\frac{225}{45}$ or 1)

- 8 Which of the following is a unit rate?
(140LE per week or 90km p-er 60 minutes or 25LE for each 3kg
or 5km per 2hours)

- 9 $0.35 \times 4.5 = 3.5 \times \dots\dots\dots$. (45 or 4.5 or 0.45 or 0.045)

Q2: Answer the following:

- 1 Ali bought a flat for 480,000 LE. He paid 50% of its price. How much money did he pay?

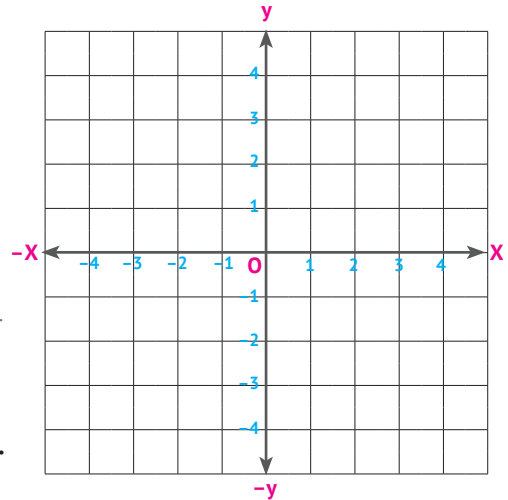
2 Graph the points:

A (-4 , 3), B (2 , 3), and C (-4 , -2).

A What is the type of the triangle ABC according to its angles?

.....

B The area of the triangle ABC = square angles.



3 If 184.5LE is distributed among some pupils, and each pupil receives 20.5LE. How many pupils are there?

.....

4 Ahmed drinks 10,000mL of water in a week. How many liters of water is that?

5 30% of the students in a class are wearing black. There are 60 students in the class. How many students are wearing black?

.....

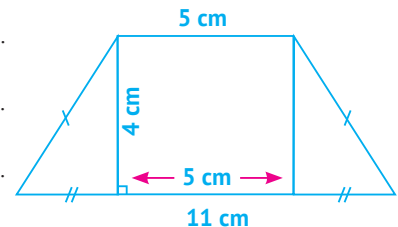
6 The area of the opposite trapezium is

.....

.....

.....

.....



7 Find the result:

A $0.45 \times 0.1 =$

B $4 \frac{1}{5} \times 2 \frac{1}{2} =$

C $3 \div \frac{2}{4} =$

Model

2

Q1: Choose the correct answer:

① $3 \div \frac{1}{4} = \dots\dots\dots$. ($\frac{3}{4}$ or $\frac{4}{3}$ or $\frac{1}{12}$ or 12)

② $1 - 25\% = \dots\dots\dots$. (75 or 7.5 or 0.75 or 0.24)

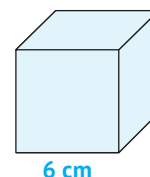
③ 48km = $\dots\dots\dots$ m (48 or 480 or 4,800 or 48,000)

④ $3.4 \times 0.2 = \dots\dots\dots$. (6.8 or 68 or 0.68 or 0.068)

⑤ The area of the triangle= $\dots\dots\dots$. ($\frac{1}{2} bh$ or $b \times h$ or $\frac{1}{2} hh$ or $\frac{1}{2} bh$)

⑥ The surface area of the opposite cube= $\dots\dots\dots$ cm².

(36 or 163 or 216 or 126.5)



⑦ If a square has a side length of 2.5cm, then its area= $\dots\dots\dots$ cm².

(0.625 or 6.25 or 62.5 or 626)

⑧ $40\% + \dots\dots\dots + 30\% = 100\%$ (25% or 30% or 35% or 70%)

⑨ The point (-2 , -3) lies in the $\dots\dots\dots$ quadrant.

(first or second or third or fourth)

Q2: Answer the following:

① Ali has 6 liters of milk and needs to divide it into bottles, each holding $\frac{3}{4}$ of liter. How many bottles will he need?

.....

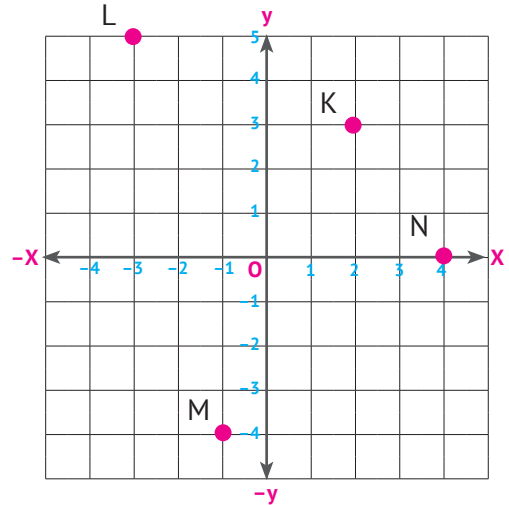
.....

- 2 Omar saves 600 LE monthly. If his monthly income is 3,000LE. Find the percentage of what he saves monthly.

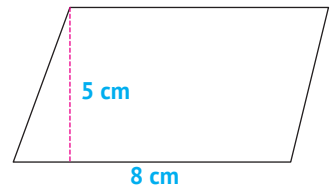
- 3 From the opposite coordinate plane:
record the coordinates of each point.

L (..... ,), K (..... ,)

M (..... ,), N (..... ,)



- 4 Find the area of the opposite parallelogram.



- 5 A cuboid with dimensions 7cm, 5cm, and 2cm. Find its volume.

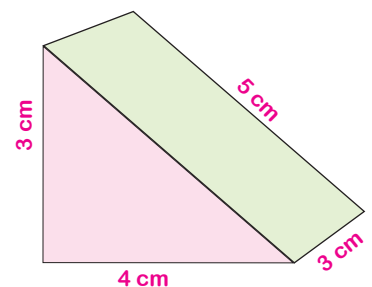
- 6 Complete the following:

A $240 : 300 = \text{.....} : \text{.....}$. (In the simplest form)

B $\frac{2}{7} \div \frac{1}{3} = \text{.....}$.

C $3.6 \div 0.12 = \text{.....}$.

- 7 Find the area of the opposit prism.



Model

3

Q1: Choose the correct answer:

① $12 : 20 = \dots\dots\dots$. (In the simplest form) ($3 : 2$ or $5 : 7$ or $5 : 3$ or $3 : 5$)

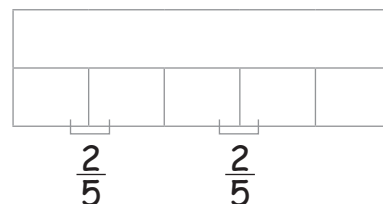
② 20% of 70 pounds = $\dots\dots\dots$ pounds. (7 or 14 or 21 or 42)

③ The area of a triangle with a base length is 8cm and a corresponding height of 6 cm is $\dots\dots\dots$ cm^2 . (12 or 24 or 48 or 42)

④ The image of the point $(2, -4)$ by reflection across the x-axis is $\dots\dots\dots$.
($(2, 4)$ or $(-2, -4)$ or $(2, -4)$ or $(-2, 4)$)

⑤ The volume of the cuboid of the dimensions 2cm, 9cm, and 10cm is $\dots\dots\dots$ cm^3 . (290 or 180 or 90 or 18)

⑥ The quotient of the opposite tape diagram is $\dots\dots\dots$. (2 or $\frac{2}{5}$ or $\frac{4}{5}$ or $\frac{5}{2}$)



⑦ The surface area of the cube = $\dots\dots\dots$.
($S \times S$ or $S + S$ or $6 \times S \times S$ or $6 + S \times S$)

⑧ From the opposite equivalent ratios, $x + y = \dots\dots\dots$.

(14 or 20 or 26 or 35)

3	12	x
5	y	10

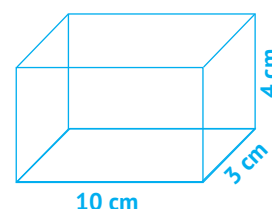
⑨ The $\dots\dots\dots$ is a ratio of the second term to 100.

(rate or ratio or unit rate or percentage)

Q2: Answer the following:

① Find the surface area of the opposite cuboid.

.....
.....
.....



- ② If the ratio of boys to girls in a class is 4 : 5 and there are 20 boys. What is the total number of pupils in the class?

.....

.....

- ③ In a mathematics exam, Youssef scored 38 out of 40 marks. What is the percentage of marks he obtained?

.....

- ④ Graph the points:

A (4 , 3), B (4 , -3), C (2 , -3), and D (2 , 3).

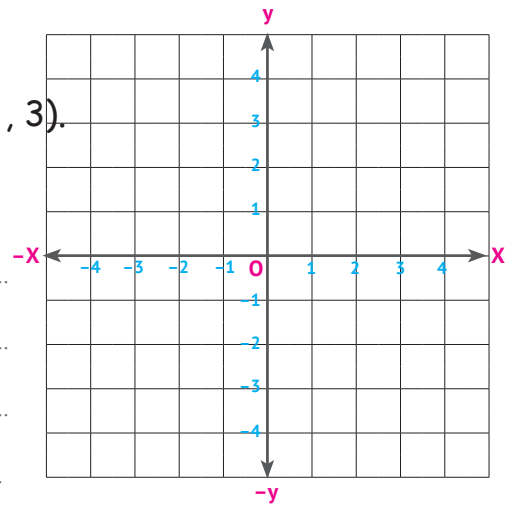
What is the name of the figure ABCD?

.....

.....

.....

.....



- ⑤ Find: the area of a parallelogram with a base length of 10 cm and a corresponding height of 6cm.

.....

- ⑥ Find: the surface area of a square-based pyramid with a base length of 8cm and a height of face 5cm.

.....

.....

- ⑦ Complete the following:

A If $B\% + 40\% + 40\% = 1$, then the value of B is

B If 3 : 5 is equivalent to x : 15, then x=

C If a car covers 240 km in 3 hours, then its speed is km/hr.

Model

4

Q1: Choose the correct answer:

- 1 In the, we compare two quantities in different units.
(ratio or rate or percentage or area)
- 2 The horizontal axis in the coordinate plane is called
(x-axis or y-axis or origin or ordered pair)
- 3 is a ratio where the second term is 100 and is represented by the symbol (%). (Unit rate or Conversion factor or Rate or Percentage)
- 4 The reciprocal of $\frac{1}{3}$ is (0.6 or $\frac{1}{3}$ or 3 or 0.3)
- 5 The unit rate of covering 20 meters per minute is
(20 m per 1 min or 1 m per 20 min or 60 m per 3 min or 3 m per 60 min)
- 6 The distance between the two points A (2 , 3) and B (7 , 3)
is units. (3 or 4 or 5 or 9)
- 7 If a box contains 4 blue marbles and 12 red marbles, then the ratio between the number of red marbles to the total number of marbles is
(1 : 3 or 3 : 4 or 3 : 1 or 1 : 4)
- 8 The conversion factor which is used to convert from kilogram (kg) to gram(s) is
($\frac{1 \text{ kg}}{1,000 \text{ g}}$ or $\frac{1 \text{ kg}}{1,000 \text{ g}}$ or $\frac{1,000 \text{ g}}{1 \text{ kg}}$ or $\frac{100 \text{ g}}{1 \text{ kg}}$)
- 9 The reflected image of the point (5 , -9) in the y-axis is
((-5 , -9) or (5 , 9) or (-5 , 9) or (5 , -9))

Q2: Answer the following:

- 1 Nada bought 2.5 kg of apples at 32LE per kilogram. How much did Nada pay in total?

.....

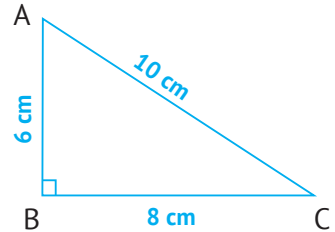
- 2 Omar had a lunch meal at a restaurant. The price of the meal was 440LE, with an additional 30% LE for service and tax. How much did Omar pay in total?

.....

- 3 Find the area of the opposite triangle.

.....

.....



- 4 In the coordinate plane:

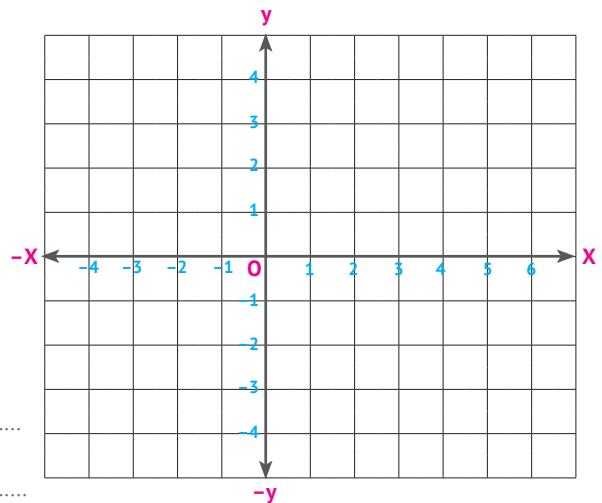
A Plot the points

A (5 , 3), B (1 , 3), C (1 , -1),
and D (5 , -1).

B Write the name of the figure.

.....

.....



- 5 If the price of the set of notebooks before discount is 180LE.
Find the price after a 10% discount.

.....

- 6 The area of a parallelogram with a base length of 8cm and a corresponding height of 6cm.

.....

- 7 Complete the following:

A $2.5 \div 0.05 =$

B $\frac{1}{7}$ of the number 28=

C If $\frac{21}{a} = \frac{7}{4}$, then a=

Model

5

Q1: Choose the correct answer:

- 1 $12 : 20 = \dots\dots\dots$. (In the simplest form) ($3 : 2$ or $5 : 7$ or $5 : 3$ or $3 : 5$)
- 2 The reciprocal of $\frac{3}{5}$ is $\dots\dots\dots$. (3 or $-\frac{5}{23}$ or $\frac{5}{3}$ or $-\frac{3}{5}$)
- 3 The height of a rhombus is 5cm, and its area is 35cm^2 , then its side length is $\dots\dots\dots$ cm. (7 or 14 or 28 or 175)
- 4 $1.25 \div 2.5 = \dots\dots\dots \div 25$ (12.5 or 1.25 or 0.125 or 125)
- 5 The area of a triangle with a base length of 8cm and a corresponding height of 6cm is $\dots\dots\dots \text{cm}^2$. (12 or 24 or 48 or 42)
- 6 20% of 90 pounds = $\dots\dots\dots$ pounds. (9 or 18 or 27 or 180)
- 7 The image of the point $(-4, 4)$ by reflection on x-axis is $\dots\dots\dots$.
($(-4, 4)$ or $(4, 4)$ or $(-4, -4)$ or $(-3, 0)$)
- 8 $9 \text{ km} \times \frac{\dots\dots\dots}{\dots\dots\dots} = 9,000 \text{ m}$ ($\frac{200 \text{ m}}{1 \text{ km}}$ or $\frac{100 \text{ g}}{1 \text{ kg}}$ or $\frac{1,000 \text{ m}}{1 \text{ km}}$ or $\frac{1 \text{ km}}{1,000 \text{ g}}$)
- 9 The distance between the two points $(-1, 2)$ and $(6, 2)$ equals $\dots\dots\dots$ units. (0 or 5 or 7 or 16)

Second: Answer the following:

- 1 The ratio of the number of lions to the number of cats is 2:7, and the total number of lions and cats is 45. How many lions and how many cats are there?

.....

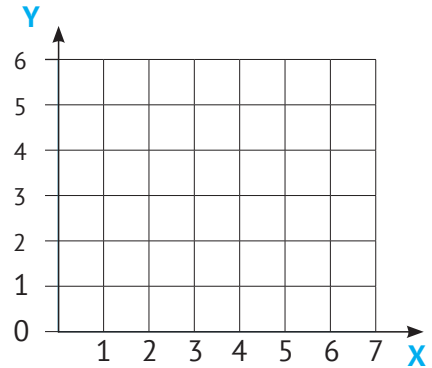
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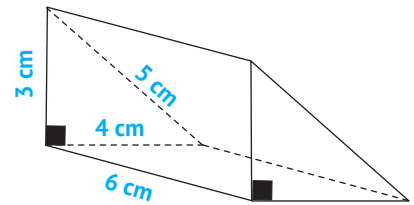
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- ② Find the area of a parallelogram with a base of 10cm and a corresponding height of 6cm.
- ③ If a school has 700 pupils and 10% of them were absent one day. How many pupils were present that day?
-
-

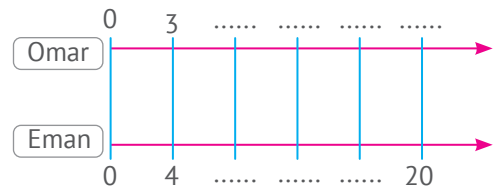
- ④ Locate the following points on the coordinate plane, then connect the points in order, **A** (1 , 1), **B** (1 , 5), **C** (4 , 5), and **D** (4 , 1) Write the name of the shape.
-



- ⑤ Find the surface area of the opposite triangular pyramid.
-
-
-
-



- ⑥ From the opposite double number line, the ratio between Omar's savings and Eman's savings is 3 : 4. If Eman saved 20 LE, then Omar saved LE.



- ⑦ If 10% of an amount of money is 50LE. Find the total amount.
-

Model

6

Q1: Choose the correct answer:

- 1 The reciprocal of $\frac{1}{2}$ is (1 or 12 or $\frac{1}{2}$ or 2)
- 2 The ratio between the perimeter of a square and its side length is (4 : 1 or 1 : 3 or 3 : 1 or 1 : 4)
- 3 The surface area of a cube whose side length is 3cm is (54 cm or 54 cm² or 54 cm³ or 45 cm²)
- 4 The unit rate of $\frac{120\text{km}}{5\text{min}}$ is km per min. (4 or 48 or 24 or 15)
- 5 The is a ratio that compares a quantity to one unit of another quantity. (unit rate or rate or ratio or place value)
- 6 $\frac{7}{10} =$ %. (7 or 10 or 70 or 17)
- 7 $5.6 \div 0.56 =$ (10 or 2 or 15 or 20)
- 8 The number of heights of a right-angled triangle is (1 or 2 or 3 or 0)
- 9 The volume of a cuboid whose base area is 25cm² and its height is 7cm is cm³. (175 or 32 or 725 or 170)

Q2: Answer the following:

- 1 Two machines produce cloth: the first machine produces 12 meters in 4 hours, and the second machine produces 18 meters in 9 hours. Find the production rate for each machine.
.....
.....

- 2 How much is $\frac{1}{4}$ the number 20?
.....

- 3 A shoe that costs EGP 1,400 has a 20% discount. Calculate the value of the amount saved and the price of the shoe after the discount?

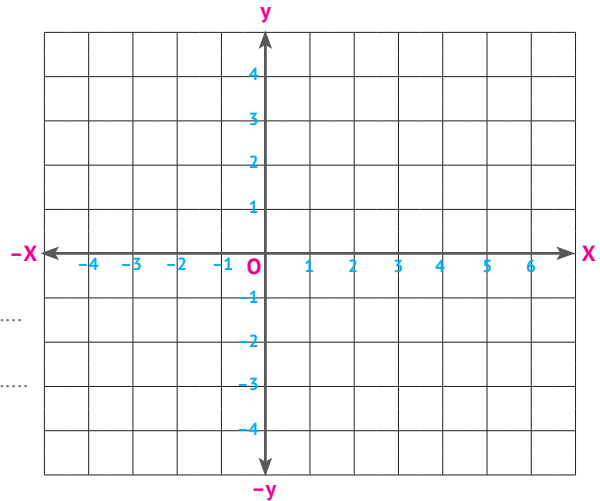
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- 4 Graph and connect the given points: A (2 , 2), B (6 , 2), C (6 , -2), D (2 , -2) (in order)
Write the name of the polygon.

.....

.....



- 5 In a classroom, if the ratio of the number of boys to the number of girls is 5 to 4 and there are 25 boys in the class, how many girls are in the class?

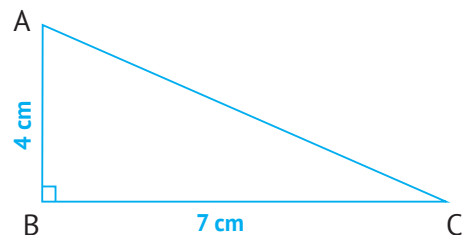
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- 6 Find the area of $\triangle ABC$.

.....

.....



- 7 0.6 km per minute= km/hour.

Model

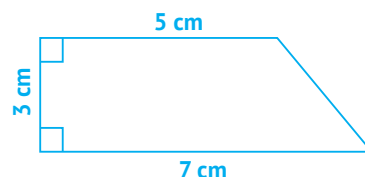
7

Q1: Choose the correct answer:

- 1 All the following points lie on the x-axis, except
((1 , 0) or (2 , 0) or (0 , 2) or (0 , 0))
 - 2 If the ratio of what Ahmed has to what Amany has is 3 : 5, and Amany has 50 LE, then Ahmed has LE. (30 or 80 or 20 or 10)
 - 3 $\frac{4}{5} =$ (Percentage form) (80% or 40% or 36% or 45%)
 - 4 $0.144 \div 1.2 =$ (12 or 0.12 or 1.2 or 0.012)
 - 5 The value of the unknown is
(40 or 480 or 300 or 120)
- | | | |
|--------|------|---------|
| Whole | Part | Percent |
| Unkown | 20 | 50% |
- 6 The area of the rhombus of side length 7cm and height 4cm is cm^2 . (11 or 22 or 28 or 56)
 - 7 60 meter per hour= meter per min. (3,600 or 120 or 360 or 1)
 - 8 The volume of the cuboid whose dimensions are 3m , 4m , and 10m is
..... m^3 . (54 or 108 or 120 or 150)
 - 9 $2 \div \frac{1}{5} =$ (5 or 10 or $\frac{2}{5}$ or $\frac{5}{2}$)

Q2: Answer the following:

- 1 Ali bought 5kg of apples for 150LE, then the price of 10kg of apples is LE.
- 2 The area of the opposite trapezium is cm^2 .



- 3 A car travels a distance of 120 kilometers in two hours, express this using the word average?

.....

- 4 Assuming you stored 20 boxes of goods, which is 80% of the boxes. What is the total number of boxes?

.....

.....

- 5 Suppose you have $\frac{8}{10}$ kg of clay, and you want to cut it into equal pieces of $\frac{1}{5}$ kg each, how many pieces can you make?

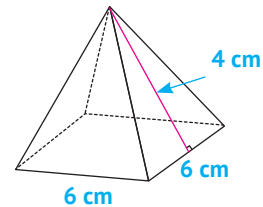
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- 6 The area of the base in the corresponding pyramid shape is equal to cm^2 .

.....

.....



- 7 A store offers a 10% discount on a shirt originally priced at 500LE, then its price after the discount is

Model

8

Q1: Choose the correct answer:

1 15 m/hr= cm/min. (25 or 250 or 500 or 60)

2 $0.04 \times 0.2 =$ (0.08 or 0.008 or 0.8 or 0.006)

3 The image of $(-2, 5)$ by reflection on the y-axis is
 ((5, -2) or (-2, -5) or (2, 5) or (2, -5))

4 The area of the opposite parallelogram
 is cm^2 .

(12 or 18 or 6 or 9)



5 If a cube with an edge of 5cm, then its volume is cm^3 .
 (125 or 25 or 10 or 15)

6 The number of heights of the obtuse-angled triangle is
 (1 or 2 or 3 or 5)

7 A cuboid with a squared base, its volume is 150cm^3 . and its height is
 6cm, then the side length of its base is cm.
 (5 or 6 or 25 or 900)

8 10 % of = 27 (540 or 270 or 10 or 2.7)

9 Salma reads 280 pages of stories weekly, then she reads
 pages daily. (40 or 7 or 14 or 70)

Q2: Answer the following:

1 Maher bought 3kg of bananas for 60LE. How much will he need to pay
 to buy 7kg of bananas?

.....

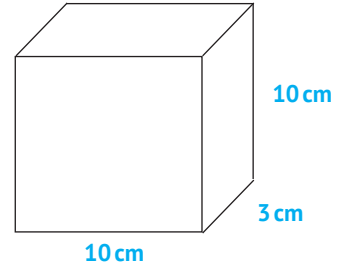
- 2 Sara got 48 marks out of 50 in an exam. Find the percentage of her mark.

.....

- 3 In the opposite figure:
calculate the surface area.

.....

.....



- 4 If 2 liters of milk is to be divided into containers of $\frac{1}{8}$ liters each, how many containers can the milk be divided into?

.....

.....

- 5 Convert the speed of 500cm/s to meters per second using the conversion factor?

.....

.....

- 6 A shirt that costs 1200EGP has a 40% discount, calculate the value of the amount saved and the price of the shirt after the discount?

.....

.....

- 7 A rectangular prism has dimension of 7cm, 5cm, and 3cm. Find its volume.

.....

.....

Model

9

Q1: Choose the correct answer:

- 1 If $8 : x - 1 = 6 : 12$, then the value of $x =$ (17 or 8 or 15 or 7)
- 2 $\div \frac{1}{2} = \frac{1}{3}$ ($\frac{1}{6}$ or 6 or $\frac{3}{1}$ or $\frac{2}{3}$)
- 3 5.3 ton 5700kg ($>$ or $<$ or $=$ or otherwise)
- 4 A triangle with base length of 10cm, and its corresponding height is 6cm. Then its area = cm^2 . (30 or 15 or 45 or 60)
- 5 In a restaurant, there's 10% added to each meal as service. If the price of a meal is 240LE, then the price of the meal after adding service is LE. (248 or 264 or 24 or 258)
- 6 If the sum of edges of a cube is 36cm, then the area of one face is cm^2 . (6 or 18 or 72 or 9)
- 7 61% of a liter= milliliter. (61 or 610 or 6.1 or 6100)
- 8 If the area of a parallelogram is 98cm^2 , and its base is 7cm, then its corresponding height cm. (14 or 6 or 7 or 28)
- 9 The formula for the surface area of a cube is ($6s^2$ or $4s^2$ or $6s$ or s^2)

Q2: Answer the following:

- 1 The reciprocal of the number is $3\frac{3}{5}$

.....

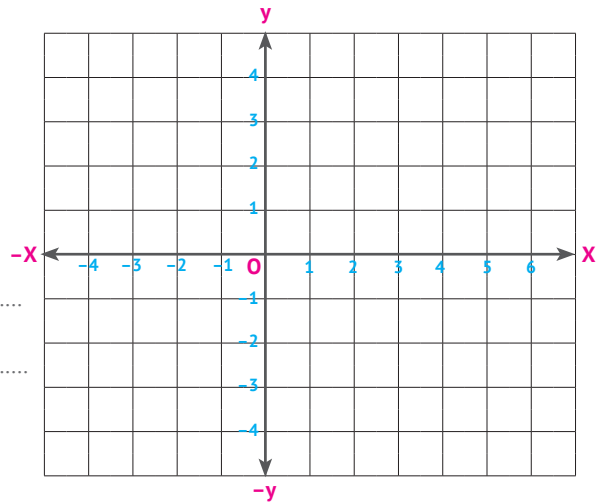
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- 2 What is the y-coordinate of any point on the x-axis?

.....

.....

- 3 Use graph paper to draw the points $A(1, 1)$, $B(1, 5)$ and $C(5, 1)$, then determine what type of geometric figure ABC ?

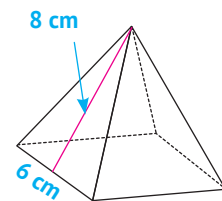


- 4 You go to the movie theatre and want to buy popcorn and you have two options: the first pack of 6 cups for EGP 60 and the second pack of 8 cups for EGP 76, which is the best option to buy?

- 5 Aya bought a car for EGP 760,000. She paid 35% of its price. How much money did she pay?

- 6 A triangle has an area of 45cm^2 , and its base is 9cm. Find the corresponding height.

- 7 In the following square pyramid:
Find the surface area.



Model

10

Q1: Choose the correct answer:

1 $2.5 \div 0.05 =$ (5 or 50 or 500 or 0.5)

2 In one month's exam, Dalia got 27 marks out of 30. The percentage of Dalia's score for the total score is
(70 or 80 or 81 or 90)

3 A square-based pyramid has a square base and four lateral faces.
(squares or triangles or rectangles or circles)

4 2.5 liters 205mL (> or < or = or otherwise)

5 15% of 200LE = LE. (300 or 30 or 3 or 3,000)

6 The point $(-3, -3)$ is located in the quadrant.
(second or first or third or fourth)

7 The reciprocal of the fraction $\frac{1}{7}$ is (7 or $\frac{1}{7}$ or 1 or 6)

8 If a parallelogram has an area of 48cm^2 and a base length of 6cm, then its corresponding height is cm. (9 or 8 or 7 or 8.5)

9 From the opposite equivalent ratios,

$A + B =$ (98 or 97 or 96 or 95)

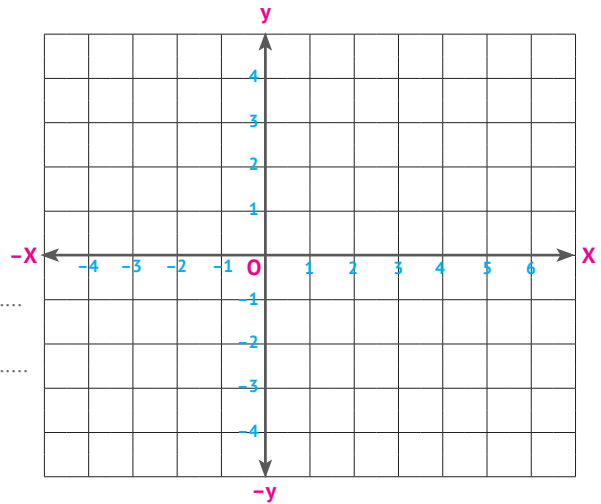
4	36	B
9	A	36

Q2: Answer the following:

1 The number of pupils in school is 720. One day, 7.5% of them were absent. Find the number of the present pupils that day.

.....
.....

- 2 Plot and label the points (3 , 1) and (-2 , 1) on this grid, then find the distance between them.



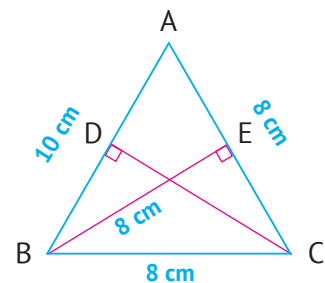
- 3 If the speed of a train is 3km per min. Find the speed in km per hour.

- 4 Menna bought a dress for 1800 pounds after a 20% discount. What was the original price of the dress before the discount?

- 5 If the base area of a cuboid is 27cm^2 , and its height is 5cm, find the volume of the cuboid.

6 $1 - 9\% = \dots\dots\dots \%$

- 7 According to the following triangle, find the length of CD.



Model 1

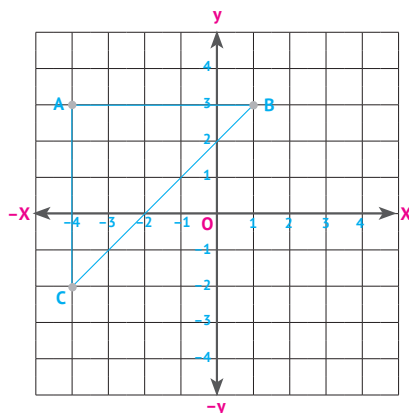
First

- 1 30
- 2 27
- 3 20 : 24
- 4 12
- 5 36 cm²
- 6 =
- 7 $\frac{5}{9}$
- 8 140 LE per week.
- 9 0.45

Second

1 $\frac{50}{100} \times 480,000 = 240,000$

2



a • Right triangle.

b $\frac{1}{2} \times 6 \times 5 = 15$

3 Number of pupils = $184.5 \div 20.5 = 1845 \div 205 = 9$ pupils.

4 10,000 mL = 10,000 mL $\times \frac{1 \text{ L}}{1000 \text{ mL}} = 10\text{L}.$

5 Then number of students
 $= \frac{30 \times 60}{100} = 18$ students.

6 The area of triangle (1) = $\frac{1}{2} \times 3 \times 4 = 6 \text{ cm}^2$
 The area of triangle (2) = $\frac{1}{2} \times 3 \times 4 = 6 \text{ cm}^2$

The area of rectangle = $5 \times 4 = 20 \text{ cm}^2$

The area of trapezium = $6 + 6 + 20 = 32 \text{ cm}^2$

7 a 0.045 b $\frac{21}{5} \times \frac{5}{2} = \frac{21}{2} = 10 \frac{1}{2}$
 c $3 \times \frac{4}{2} = 6$

Model 2

First

- 1 12
- 2 0.75
- 3 48,000
- 4 0.68
- 5 $\frac{1}{2}bh$
- 6 216
- 7 6.25
- 8 30%
- 9 Third.

Second

1 Number of bottles = $6 \div \frac{3}{4} = \frac{24}{3} = 8$ bottles.

2 Percentage = $\frac{600}{300} \times 100\% = 20\%$

3 L (-3, 5), K (2, 3) M (-1, -4), N (4, 0)

4 Area = $b \times h = 8 \times 5 = 40 \text{ cm}^2$

5 Volume = $7 \times 5 \times 2 = 70 \text{ cm}^3$

6 a 4 : 5 b $\frac{2}{7} \times \frac{3}{1} = \frac{6}{7}$

c $3.6 \div 0.12 = 360 \div 12 = 30$

7 The area of face (1) = $5 \times 3 = 15 \text{ cm}^2$

The area of face (2) = $3 \times 3 = 9 \text{ cm}^2$

The area of face (3) = $4 \times 3 = 12 \text{ cm}^2$

The area top base = $\frac{1}{2} \times 4 \times 3 = 6 \text{ cm}^2$

The area bottom base = $\frac{1}{2} \times 4 \times 3 = 6 \text{ cm}^2$

Surface area of prism = $15 + 9 + 12 + 6 + 6 = 36 \text{ cm}^2$

Model 3

First

- 1 3 : 5
- 2 14
- 3 24
- 4 (2, 4)
- 5 180
- 6 $\frac{5}{2}$
- 7 6 X S X S
- 8 26
- 9 Percentage.

Second

1 SA = $2 \times (10 \times 3 + 3 \times 4 + 4 \times 10)$
 $= 2 (30 + 12 + 40) = 2 \times 82 = 164 \text{ cm}^2$

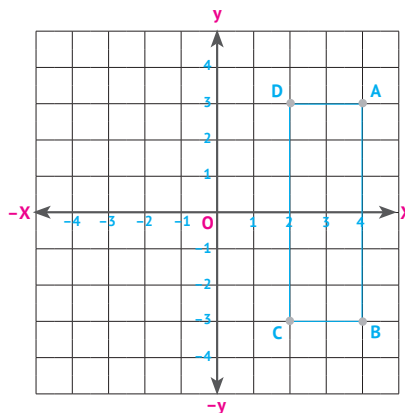
2 Value of one part = $20 \div 4 = 5$ boys.

Number of girls = $5 \times 5 = 25$ girls.

Total = $20 + 25 = 45$ pupils.

3 Percentage = $\frac{38}{40} \times 100\% = 95\%$

4



It's a rectangle.

5 The area of parallelogram = $b \times h$
 $= 10 \times 6 = 60 \text{ cm}^2$

6 The area of face = $\frac{1}{2} \times 8 \times 5 = 20 \text{ cm}^2$

The area top base = $8 \times 8 = 64 \text{ cm}^2$

Surface area of pyramid = $64 + (20 \times 4) = 144 \text{ cm}^2$

7 a 20 b 9 c 80

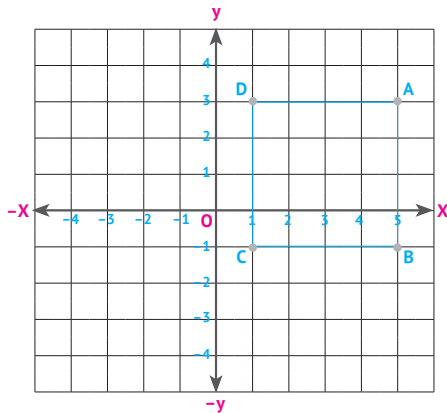
Model 4

First

- 1 Rate. 2 X-axis. 3 Percentage.
 4 3 5 20 m per 1 min 6 5
 7 3 : 4 8 $\frac{1,000 \text{ g}}{1 \text{ kg}}$ 9 $(-5, -9)$

Second

- 1 She paid = $32 \times 2.5 = 80 \text{ LE}$.
 2 Additional = $\frac{30}{100} \times 440 = 132 \text{ LE}$.
 Total payment = $440 + 132 = 572 \text{ LE}$.
 3 Area = $\frac{1}{2} \times b \times h = \frac{1}{2} \times 8 \times 6 = 24 \text{ cm}^2$
 4 a



b The figure is a square.

- 5 Value of discount = $\frac{10 \times 180}{100} = 18 \text{ LE}$.
 The price after discount = $180 - 18 = 162 \text{ LE}$.
 6 The area of parallelogram = $b \times h = 8 \times 6 = 48 \text{ cm}^2$
 7 a $250 \div 5 = 50$ b $28 \div 7 = 4$
 c $a = \frac{21 \times 4}{7} = 12$

Model 5

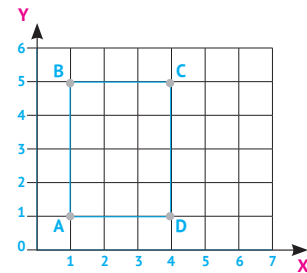
First

- 1 3 : 5 2 $\frac{5}{3}$ 3 7 4 12.5
 5 24 6 18 7 $(-4, -4)$
 8 $\frac{1,000 \text{ m}}{1 \text{ km}}$ 9 7

Second

- 1 Sum of parts = $2 + 7 = 9$ parts.
 Value of one part = $45 \div 9 = 5$ animals.
 The number of lions = $2 \times 5 = 10$ lions.
 The number of cats = $7 \times 5 = 35$ cats.
 2 Area = $10 \times 6 = 60 \text{ cm}^2$
 3 Number of Absent = $\frac{10}{100} \times 700 = 70$ students.
 Number of presents = $700 - 70 = 630$ students.

4



The shape is a rectangle.

- 5 The area of face (1) = $5 \times 6 = 30 \text{ cm}^2$
 The area of face (2) = $3 \times 6 = 18 \text{ cm}^2$
 The area of face (3) = $4 \times 6 = 24 \text{ cm}^2$
 The area top base = $\frac{1}{2} \times 4 \times 3 = 6 \text{ cm}^2$
 The area bottom base = $\frac{1}{2} \times 4 \times 3 = 6 \text{ cm}^2$
 Surface area of prism = $30 + 18 + 24 + 6 + 6 = 84 \text{ cm}^2$
 6 15 LE.
 7 The total amount = $\frac{50 \times 100}{10} = 500 \text{ LE}$.
 c $3.6 \div 0.12 = 360 \div 12 = 30$

Model 6

First

- 1 2 2 4 : 1 3 54 cm² 4 24
5 Unit rate. 6 70 7 10
8 3 9 175

Second

- 1 The rate first = $\frac{12}{4} = 3$ m/ hr.
The rate second = $\frac{18}{9} = 2$ m/ hr.
2 $\frac{1}{4} \times 20 = 5$
3 The discount = $1400 \times 20\% = 280$ EGP.
The price after discount = $1400 - 280 = 1120$ EGP.
4 Draw by yourself. The shape is square.
5 The number of girls = $\frac{4}{5} \times 25 = 30$ girls.
6 $\frac{1}{2} \times 7 \times 4 = 14$ cm²
7 36

Model 7

First

- 1 (0 , 2) 2 30 3 80% 4 0.12
5 40 6 28 7 1 8 120
9 10

Second

- 1 Price of 1 kg = $\frac{150}{5} = 30$ L.E.
Price Of 10 kg = 300 L.E.
2 $3 \times 5 + \frac{1}{2} \times 2 \times 3 = 18$ cm²
3 (The average) The rate = $\frac{120}{2} = 60$ km/ hr.
4 The total = $20 \div 80\% = 25$ boxes.
5 The number pieces = $\frac{8}{10} \div \frac{1}{5} = \frac{8}{10} \times 5 = 4$ pieces.
6 $6 \times 6 = 36$ cm²
7 The discount = $500 \times 10\% = 50$ L.E.
The price after discount = $500 - 50 = 450$ L.E.

Model 8

First

- 1 25 2 0.008 3 (2 , 5) 4 12
5 125 6 3 7 5 8 270
9 40

Second

- 1 The price of 7 k = $\frac{60}{3} \times 7 = 140$ L.E.
2 $\frac{48}{50} \times 100\% = 96\%$
3 S.A = $2 \times (3 \times 10 + 3 \times 10 + 10 \times 10)$
 $2 \times 160 = 320$ cm²
4 $2 \div \frac{1}{8} = 2 \times 8 = 16$ contaoners.
5 $500 \times \frac{1 \text{ m}}{100 \text{ cm}} = 5$ m/ sec.
6 The discount = $1200 \times 40\% = 480$
The price after discount = $1200 - 480 = 720$ EGP
7 $V = 7 \times 5 \times 3 = 105$ cm³

Model 9

First

- 1 17 2 $\frac{1}{6}$ 3 < 4 30
5 264 6 9 7 610 8 14
9 6 s²

Second

- 1 $\frac{5}{18}$ 2 is zero.
3 Draw by yourself. Right angled triangle.
4 The price of first pack = $\frac{60}{6} = 10$ EGP/ cup.
The price of second pack = $\frac{76}{8} = 9.5$ EGP/ cup.
5 $760,000 \times 35\% = 226,000$ EGP.
6 The height = $\frac{2 \times 45}{9} = 10$ cm.
7 The area of base = $6 \times 6 = 36$ cm²
The area of one face = $\frac{1}{2} \times 6 \times 8 = 24$ cm²
The S.A = $36 + 4 \times 24 = 132$ cm²

Model 10

First

- 1 50 2 90 3 Triangles.
- 4 > 5 30 6 Third. 7 7
- 8 8 9 97

Second

- 1 The number of absent= $720 \times 7.5\% = 54$
The number of present= $720 - 54 = 666$ students.
- 2 Draw by yourself.
 $| 3 | + | - 2 | = 5$ length unit.
- 3 The speed of the train= $3 \times \frac{60 \text{ min}}{1 \text{ hr}} = 180 \text{ km / hr}$
- 4 The price before discount= $800 \div 80\%$
 $= 2250$ pounds.
- 5 $v = 27 \times 5 = 135 \text{ cm}^2$
- 6 91%
- 7 The area= $\frac{1}{2} \times 8 \times 8 = 32 \text{ cm}^2$
 $\frac{1}{2} \times 10 \times \text{CD} = 32$
 $\text{CD} = \frac{2 \times 32}{10} = 6.4 \text{ cm.}$

حمل الآن

مجاناً وحصرياً

امتحانات رقم (4)

الترم الثاني



Mathematics

Exam

1

First Question

1

Choose the correct answer:

(1) $\frac{2}{3} \div \dots = 1$

(a) $\frac{3}{2}$

(b) $\frac{3}{3}$

(c) $\frac{2}{3}$

(d) $\frac{2}{2}$

(2) 30% of L.E. = 210 L.E.



(a) 400

(b) 500

(c) 600

(d) 700

(3) $1.2 \times 0.3 = \dots$

(a) 36

(b) 3.6

(c) 0.36

(d) 0.036

(4) The reciprocal of $\frac{2}{5} = \dots$



(a) 5

(b) $\frac{5}{2}$

(c) $\frac{1}{5}$

(d) $\frac{1}{2}$

(5) The simplest form of the ratio 16 : 32 is

(a) 1 : 2

(b) 2 : 1

(c) 2 : 3

(d) 1 : 3

(6) The point (-5, 6) lies in the quadrant.

(a) first

(b) second

(c) third

(d) fourth

(7) $\frac{1 \text{ km}}{\dots}$ is a conversion factor.

(a) 100 cm

(b) 1000 m

(c) 100 m

(d) 10 m

(8) If the volume of a cuboid is 180 cm^3 and its height is 10 cm, then its base area is cm^2 .



(a) 15

(b) 30

(c) 18

(d) 6

(9) $7.8 \div 3.9 = \dots \div 39$

(a) 0.78

(b) 78

(c) 0.078

(d) 780

Second Question 2 Answer the Following questions:

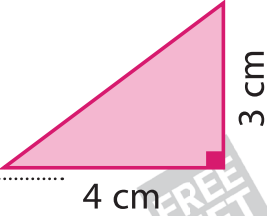
(1) If Hazem's height is 1.4 meters.
 Calculate his height in centimeters.

.....

(2) Find the volume of the cuboid whose dimensions are 6 cm, 5 cm and 4 cm.

.....

(3) Find the area of the following right triangle.



.....

(4) Write a multiplication equation to check the solution for the problem:

$$\frac{5}{8} \div \frac{1}{8} = 5$$

.....

(5) There are 500 students in a school. On Sunday, 50% of them were absent.

What is the number of the absent students?

.....

(6) The ratio 6 : x is equivalent to the ratio 12 : 20

What is the value of x?

.....

(7) Observe the coordinate plane then answer:

(a) Graph the points A (2 , 4) , B (2 , -3)

(b) A student says the distance between point A and point B is 1.

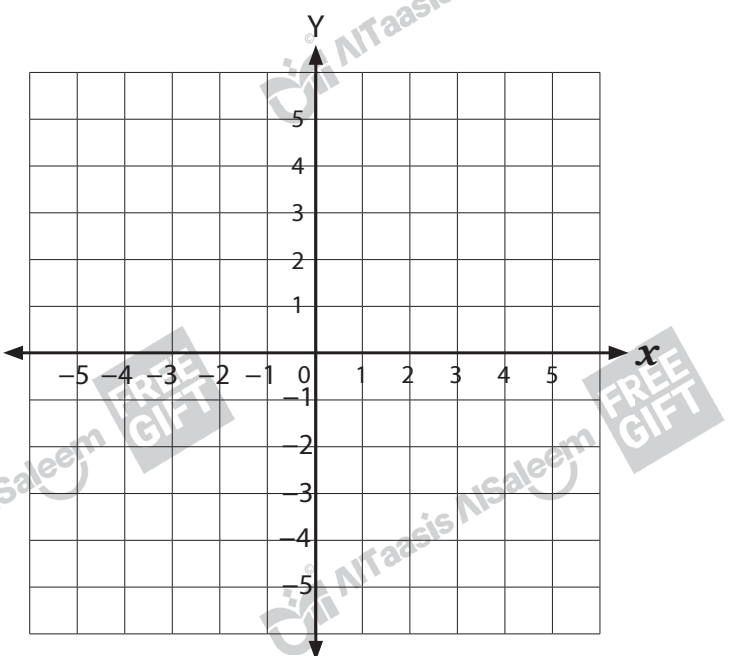
Explain why he is wrong:

.....

.....

.....

.....



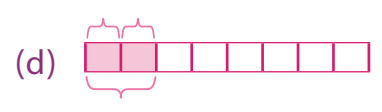
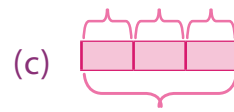
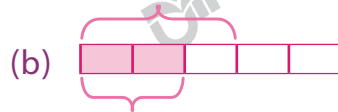
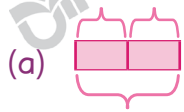
Mathematics

Exam

2

First Question 1 Choose the correct answer:

- (1) The model that represents the division problem: $1 \div \frac{1}{2}$ is



- (2) $\div \frac{3}{4} = 0$

(a) 1

(b) 0

(c) $\frac{4}{3}$

(d) $\frac{3}{4}$

- (3) The opposite tape diagram represents the ratio

(a) 4 : 5

(b) 5 : 4

(c) 3 : 5

(d) 4 : 3



- (4) Which of the following is a conversion factor of years and months?



(a) $\frac{1 \text{ year}}{10 \text{ months}}$

(b) $\frac{12 \text{ months}}{1 \text{ year}}$

(c) $\frac{\text{year}}{1 \text{ month}}$

(d) $\frac{1 \text{ month}}{12 \text{ years}}$

- (5) $0.03 \times 0.2 =$

(a) 0.06

(b) 0.006

(c) 0.6

(d) 6

- (6) The volume of a cuboid whose dimensions are 2 cm, 4 cm, 5 cm is cm^3

(a) 10

(b) 25

(c) 40

(d) 50

- (7) What percentage is 20 L.E. of 400 L.E.?



(a) 5%

(b) 10%

(c) 15%

(d) 20%

- (8) If the distance between 6 and -3 on the number line = units.

(a) 9

(b) 8

(c) 3

(d) 2

- (9) The image of the point $(-2, -3)$ by reflection across the x-axis is

(a) $(2, 3)$

(b) $(2, -3)$

(c) $(-2, 3)$

(d) $(-2, -3)$

Second Question 2 Answer the Following questions:

- (1) The ratio of the number of apples to oranges in a fruit basket is 1 : 3 .
If the number of oranges is 18

Find the number of apples:

.....

- (2) Find the following:

(a) $\frac{3}{5} \div 2 =$

(b) $3.6 \times 3.6 =$

- (3) A class has 40 students. 60% of them prefer football.



How many students prefer football?

.....

- (4) A teacher distributed 176 L.E. among his students and each student received 8.8 L.E.

What is the number of students?

.....

- (5) A cuboid has dimensions 1 m, 2 m, and 2.5 m



Find the new volume if only the length is doubled:

.....

- (6) At a zoo, elephants drink about 40,000 milliliters of water.

How many liters of water is that?

.....

- (7) In the opposite coordinate plane:

(a) Plot the following points.

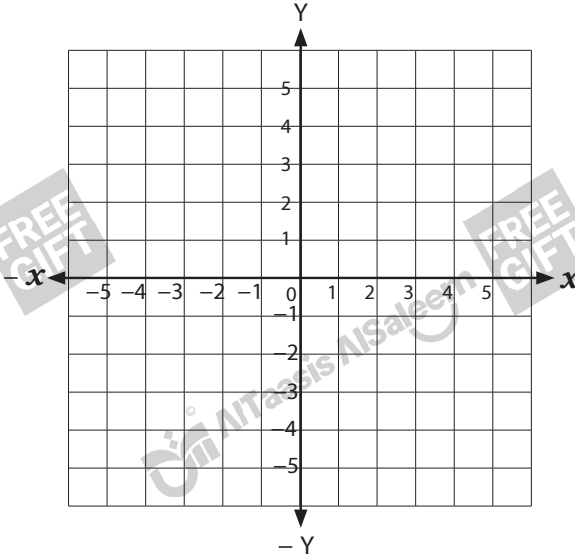
(1 , 2) , (0 , - 3) , (- 4 , 2) , (- 4 , - 3)

(b) Do they form a closed shape?

Yes or No

(c) If "Yes" write the name of the shape.

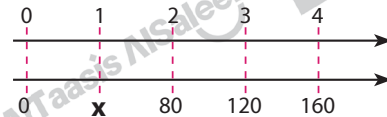
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Mathematics

Exam 3

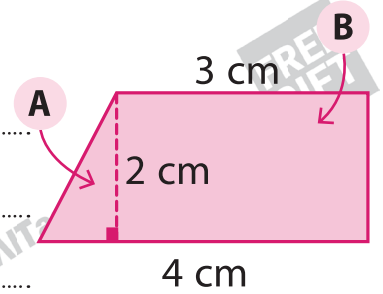
First Question 1 Choose the correct answer:



- (1) From the opposite double number line, the value of x is
 (a) 40 (b) 30 (c) 50 (d) 45
- (2) If Ammar pays 100 L.E. to buy 4 books, how much money will he pay for 3 books of the same type? L.E.
 (a) 25 (b) 75 (c) 50 (d) 150
- (3) $20\% + \dots = 25\%$
 (a) 1% (b) 5% (c) 10% (d) 20%
- (4) The image of the point $A(3, -3)$ by reflection across the y -axis is
 (a) $(3, 3)$ (b) $(-3, 3)$ (c) $(3, -3)$ (d) $(-3, -3)$
- (5) The reciprocal of $\frac{9}{18}$ in the simplest form is
 (a) $\frac{1}{9}$ (b) $\frac{1}{18}$ (c) $\frac{1}{2}$ (d) 2
- (6) The area of one face of a cube is 5 cm^2 . Then its surface area is cm^2
 (a) 10 (b) 20 (c) 30 (d) 50
- (7) Compare: $3.2 \div 0.4$ $32 \div 4$
 (a) $>$ (b) $<$ (c) $=$ (d) Otherwise
- (8) The area of a triangle is 60 cm^2 and its height is 10 cm. The length of the base is cm
 (a) 12 (b) 300 (c) 0.3 (d) 150
- (9) The ratio of 100 : 300 in the simplest form is
 (a) 1 : 1 (b) 1 : 3 (c) 3 : 1 (d) 11 : 30

Second Question 2 Answer the Following questions:

- (1) Calculate the area of the given trapezium.



- (2) Amal takes 12.5 minutes to make a pizza.



Calculate the time that Amal takes in seconds.

- (3) Hajar wants to prepare a dessert recipe.



The recipe requires $\frac{2}{3}$ cup of milk.

Hajar has $\frac{4}{9}$ cup of milk

(a) Does she have enough milk to make the whole recipe?

(b) What fraction of the recipe can she prepare using the milk she has?

- (4) Calculate the area of a triangle if its base is 20 cm and the corresponding height is 7 cm.

- (5) A cuboid has dimensions 5 cm, 4 cm, and 1.5 cm.



Find its volume if all three dimensions are doubled.

- (6) The price of a TV is 2,500 L.E. if it has a discount of 10%.

Find the value of the discount.

- (7) Walid earns 720 L.E. for working 9 hours.

Calculate how much he earns if he works for 5 hours.

Mathematics

Exam 4

First Question 1 Choose the correct answer:

- (1) Shreef has 1500 L.E. . He saves 20% of it and spends the rest.
How much money did he save?
- (a) 300 (b) 30 (c) 350 (d) 530
- (2) The point (A , 3) lies on the y-axis, so A =
- (a) 5 (b) 3 (c) 0 (d) -6
- (3) The area of a parallelogram with base length 30 cm and its corresponding height 10 cm is
- (a) 30 (b) 300 (c) 150 (d) 3
- (4) The second term of the ratio 3:4 is
- (a) 3 (b) 4 (c) 3×4 (d) $3 + 4$
- (5) If the ratio 2 : 3 is equivalent to 6:x, then x =
- (a) 9 (b) 24 (c) 15 (d) 27
- (6) The volume of a cuboid is 400 cm^3 and its length is 10 cm and width 5 cm, then its height is cm.
- (a) 8 (b) 20 (c) 50 (d) 80
- (7) How many halves are in 12?
- (a) 22 (b) 24 (c) 26 (d) 28
- (8) $5 \div \frac{1}{5}$ $5 \times \frac{1}{5}$
- (a) < (b) > (c) = (d) otherwise
- (9) The point (1 , 1) lies in the quadrant.
- (a) first (b) second (c) third (d) fourth

Second Question 2 Answer the Following questions:

- (1) Calculate the surface area of the opposite triangular prism.



.....

- (2) A parallelogram has a base length 12 cm and the corresponding height to this base is 6 cm.



Find its area.

.....

- (3) What is 30% of 300 pounds?

.....

- (4) **Complete:**

(a) Eman covered 60 m in 5 minutes. Then, the unit rate is

(b) $\frac{3}{5} \div \frac{1}{10} =$

- (5) A candy factory produces 150 pieces of candy per hour.



Calculate the number of pieces of candy the factory produces in 8 hours.

.....

- (6) 3 friends share $\frac{3}{5}$ of a pizza equally.

Find the share of each of them using the model.



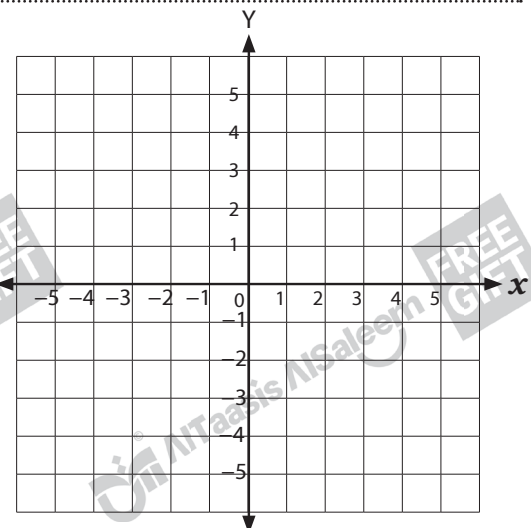
- (7) Plot the point A (1 , 2) , B (5 , 2) , C (5 , -2)

and D (1 , -2)

Connect the points in order.

What is the name of the polygon ABCD?

.....



Mathematics**Exam 5****First Question 1 Choose the correct answer:**

- (1) $\frac{9}{15}$ in the simplest form is
- (a) $\frac{5}{3}$ (b) $\frac{4}{5}$ (c) $\frac{3}{5}$ (d) $\frac{10}{15}$
- (2) $65\% = \dots\dots\dots$
- (a) 0.5 (b) 0.65 (c) 0.75 (d) 0.85
- (3) The reflection of the point across the x-axis is the point $(-4, 7)$
- (a) $(-4, 7)$ (b) $(4, -7)$ (c) $(-4, -7)$ (d) $(4, 7)$
- (4) 1% of 200 L.E. = L.E.
- (a) 0.02 (b) 0.2 (c) 2 (d) 20
- (5) The volume of a cuboid of dimensions 8 cm, 6 cm and 5 cm is cm^3
- (a) 210 (b) 240 (c) 200 (d) 260
- (6) $3.2 \div 0.32 = \dots\dots\dots$
- (a) 0.1 (b) 1 (c) 10 (d) 100
- (7) The number of altitudes of the right-angled triangle is
- (a) 1 (b) 2 (c) 3 (d) 0
- (8) Which of the following has the correct unit for the area of a triangle?
- (a) 28 cm (b) 22.8 cm (c) 28 cm^3 (d) 28 cm^2
- (9) Which of the following is the sentence that expresses a unit rate?
- (a) 3 pens for each student (b) 6 pieces of candy per 3 students
- (c) 6 km per 3 minutes (d) 4 donuts per 4 students

Second Question 2 Answer the Following questions:

- (1) A piece of land in the shape of a parallelogram has a base length 18 meters, and a corresponding height 12 meters.
A house was built inside it in the shape of a rhombus with a side length 9 meters and a height of 8 meters. **Find the area of the remaining part of the land.**

.....
.....

- (2) Find the value of n:

(a) $\frac{n}{6} = \frac{6}{12}$

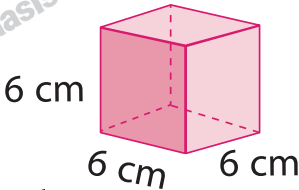
.....

(b) $n \times \frac{5}{8} = \frac{1}{16}$

.....

- (3) Find the quotient: $3.6 \div 0.09 =$

- (4) Calculate the surface area of the opposite cube.



.....

- (5) Fatima obtained 50 marks out of 80 marks in the mathematics test.



Calculate the percentage of the marks she obtained.

.....

- (6) Mazin has 6 liters of milk. He needs to divide it into small bottles of $\frac{3}{4}$ liter each.
How many bottles will he need?

.....

- (7) Plot the point A (2 , 1), B (− 4 , 1), C (− 4 , −3).

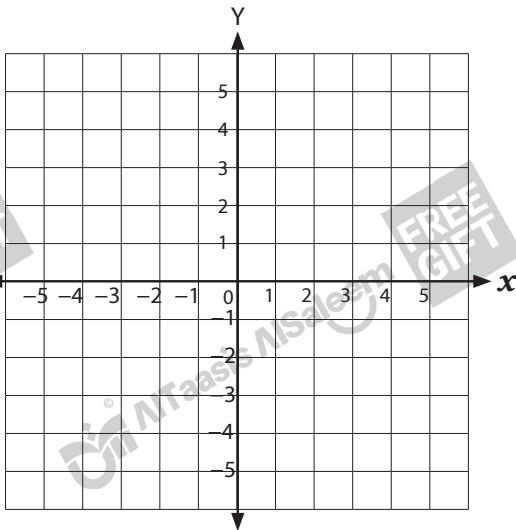
(a) Find the point D which makes ABCD a rectangle.

Point D (..... ,)

(b) Find the lengths of AB and BC.

length of AB =

length of BC =



Mathematics

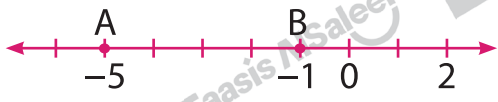
Exam

6

First Question

1

Choose the correct answer:

- (1) $\times \frac{3}{5} = 1$
(a) 1 (b) $\frac{1}{5}$ (c) $\frac{3}{5}$ (d) $\frac{5}{3}$
- (2) A cuboid has a volume 50 cm^3 . Find its volume when two of its dimensions are doubled cm^3
(a) 50 (b) 100 (c) 150 (d) 200
- (3) A solid with two congruent triangular bases and 3 rectangular faces is called
(a) pyramid (b) cube (c) cuboid (d) triangular prism
- (4) The y-coordinate of the origin point is
(a) (0 , 0) (b) 1 (c) 0 (d) (0 , 1)
- (5) From the opposite tape diagram, if Nada's age is 10 years, then Mena's age is years
(a) 12 (b) 18 (c) 15 (d) 9
Nada's age
Mena's age
- (6) The distance between A and B on the opposite number line is units
(a) 6 (b) 5 (c) 4 (d) 7

- (7) $\frac{8}{10} = \dots\dots\dots$
(a) 8% (b) 10% (c) 18% (d) 80%
- (8) Which of the following points lies in the third quadrant?
(a) (2 , 3) (b) (2 , - 3) (c) (- 2 , 3) (d) (- 2 , - 3)
- (9) A rhombus with area 60 cm^2 and a height is 10 cm. Then its side length cm
(a) 6 (b) 600 (c) 0.6 (d) 60

Second Question 2 Answer the Following questions:

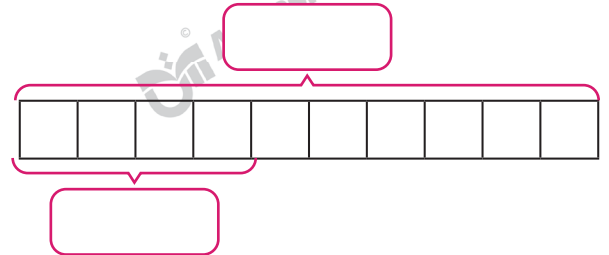
(1) Find:

(a) $2.31 \times 0.23 = \dots\dots\dots$

(b) $\frac{3}{15} \div \frac{6}{5} = \dots\dots\dots$

(2) Use the opposite tape diagram to find 40% of 250.

(Each box represents 10%)



(3) A player swims 80 m in 2 hours.

Find the distance he swims in 1 hour at the same speed:

The answer: $\dots\dots\dots$

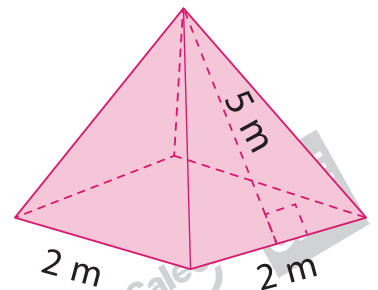
(4) If the ratio between the number of boys and the number of girls in a school is 3 : 4, and the number of girls is 24, find the number of boys.

The answer: $\dots\dots\dots$

(5) Find the total surface area of the opposite square-based pyramid.



The answer: $\dots\dots\dots$



(6) Find the area of a parallelogram of base length 10 cm and its corresponding height 6 cm.

The answer: $\dots\dots\dots$

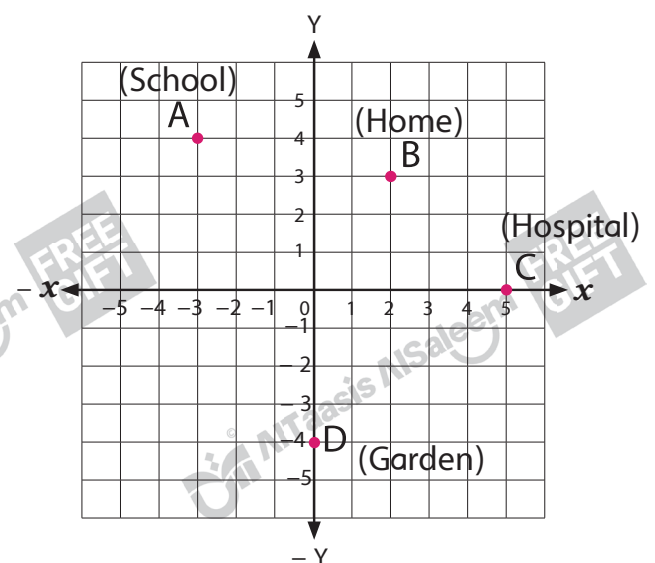
(7) **From the opposite coordinate plane.**
Write the coordinates of each building.

School A ($\dots\dots\dots$, $\dots\dots\dots$)

Home B ($\dots\dots\dots$, $\dots\dots\dots$)

Hospital C ($\dots\dots\dots$, $\dots\dots\dots$)

Garden D ($\dots\dots\dots$, $\dots\dots\dots$)



Mathematics

Exam

7

First Question 1 Choose the correct answer:

(1) $25\% = \dots\dots\dots$

(a) $\frac{1}{2}$

(b) $\frac{1}{3}$

(c) $\frac{1}{4}$

(d) $\frac{1}{5}$

(2) 1 ton = $\dots\dots\dots$ kilograms.

(a) 10

(b) 100

(c) 1,000

(d) 0.001

(3) $2.6 \times 0.3 = \dots\dots\dots$

(a) 78

(b) 7.8

(c) 0.078

(d) 0.78

(4) $\dots\dots\dots$ is a ratio whose second term is 100.

(a) Rate

(b) Ratio

(c) Unit rate

(d) Percentage

(5) If $18 : 27$ and $A : 3$ are equivalent ratios, then the value of $A = \dots\dots\dots$ 

(a) 4

(b) 2

(c) 8

(d) 9

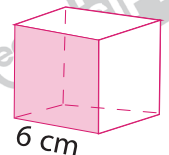
(6) The surface area of the opposite cube is $\dots\dots\dots$ cm^2

(a) 36

(b) 216

(c) 163

(d) 612

(7) The point $\dots\dots\dots$ is on the x-axis.

(a) (1, 0)

(b) (2, 3)

(c) (1, 1)

(d) (0, 1)

(8) The heights of an obtuse triangle intersect at a point which lies $\dots\dots\dots$ the triangle.

(a) acute

(b) on

(c) inside

(d) outside

(9) The numerical expression that shows how many $\frac{1}{4}$ are in $\frac{6}{8}$ is $\dots\dots\dots$ 

(a) $\frac{1}{4} \div \frac{6}{8}$

(b) $\frac{6}{8} \div \frac{1}{4}$

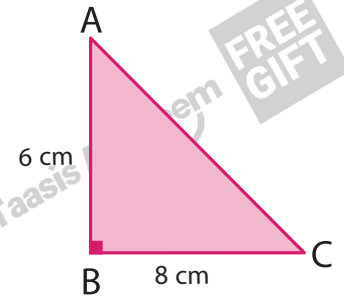
(c) $\frac{1}{4} \times \frac{6}{8}$

(d) $\frac{6}{8} - \frac{1}{4}$

Second Question 2 Answer the Following questions:

- (1) Find the area of the opposite right-angled triangle.

The answer:



- (2) Write each percentage as a fraction form:



(a) 27% (b) 9%

- (3) Marwan bought 3.5 kg of potatoes for 25 L.E. per kilogram. How much did Marwan pay?

The answer:

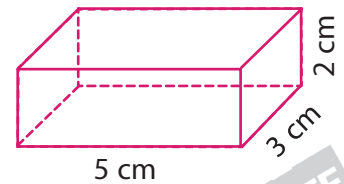
- (4) Mohamed distributed 32 pieces of cake among his friends. This number represents 80 % of the total number of cake pieces he had.

What is the total number of cake pieces Mohamed had?

.....

- (5) Find the volume of the opposite cuboid.

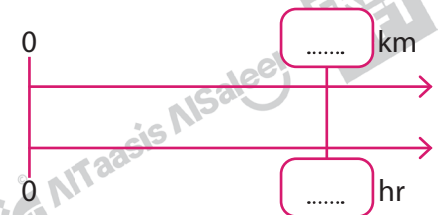
The answer:



- (6) Ali drives 450 km in 5 hours.

Find the unit rate using the double number line.

The answer:



- (7) **Using the coordinate plane shown, plot the following points:**

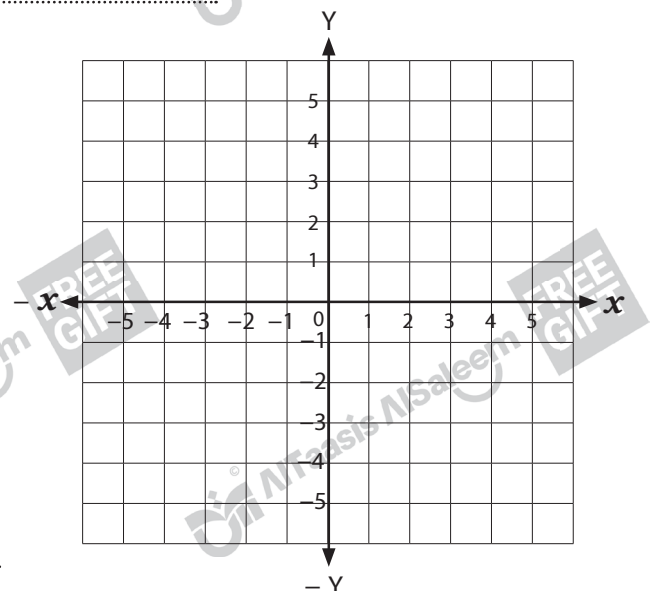
A (1 , 1)

B (3 , 0)

C (3 , 5)

What is the name of figure ABC?

.....



Mathematics Exam 8

First Question 1 Choose the correct answer:

- (1) The area of the parallelogram =
(a) $b - h$ (b) $b \times h$ (c) $2 \times (b \times h)$ (d) $\frac{h}{b}$
- (2) The distance between the two points $(-3, 5)$ and $(-6, 5)$ is units.
(a) 3 (b) 4 (c) 5 (d) 6
- (3) $0.4 = \dots\dots\dots\%$.
(a) 4 (b) 40 (c) 400 (d) 0.04
- (4) $6 \div \frac{3}{4} = \dots\dots\dots$
(a) 8 (b) $2\frac{2}{3}$ (c) 4 (d) $2\frac{3}{4}$
- (5) $5 \text{ km} \times \frac{\dots\dots\dots}{\dots\dots\dots} = 5,000 \text{ m}$.
(a) $\frac{100 \text{ m}}{1 \text{ km}}$ (b) $\frac{1000 \text{ g}}{1 \text{ kg}}$ (c) $\frac{1000 \text{ m}}{1 \text{ km}}$ (d) $\frac{1 \text{ km}}{1000 \text{ m}}$
- (6) $1.5 : 0.3 \dots\dots\dots 15 : 3$
(a) $<$ (b) $>$ (c) $=$ (d) Otherwise
- (7) If the point $(S, -3)$ lies in the third quadrant, then the value of S could be
(a) 0 (b) -5 (c) 4 (d) 2
- (8) Which expression is equivalent to (1.5×2.3) ?
(a) $\frac{15}{100} \times \frac{23}{100}$ (b) $\frac{15}{10} \times \frac{23}{10}$ (c) $\frac{15}{100} \times \frac{23}{10}$ (d) $\frac{15}{10} \times \frac{23}{100}$
- (9) The unit rate of the opposite tape diagram is
(a) 250 km per 5 hours (b) 50 km per 2 hours (c) 50 km per hour (d) 100 km per hour
- 250 km

5 hours

Second Question 2 Answer the Following questions:

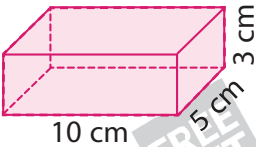
(1) From the model,
what is the value of 30% of 600?



(2) Determine the better price for buying using the unit rate in the following options:
(a) 3 donuts for 90 pounds. (b) 5 donuts for 250 pounds.

Answer:

(3) Find the surface area of the following cuboid.



(4) From the opposite equivalent ratios,
Find the value of $x + y$:

2	8	x
5	y	10

(5) If the area of a triangle is 32 cm^2 and half of the height is 8 cm,
find the length of its base:

Answer:

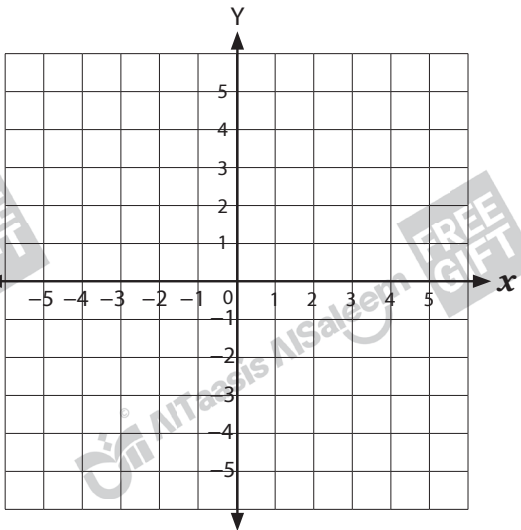
(6) LiLi saved 120 pounds in 2 days and her brother Mazen saved 180 pounds in 6 days.
Each of them wants to buy a toy for 300 pounds. Who will buy the toy first? and why?

(7) Plot the following points:

- L (− 3 , 4)
- M (− 1 , 1)
- N (− 3 , − 2)
- O (− 5 , 1).

Name the specific shape LMNO:

Classify the shape:



Mathematics

Exam

9

First Question 1 Choose the correct answer:

(1) The reciprocal of 7 is

- (a) 7 (b) $\frac{1}{2}$ (c) $\frac{1}{7}$ (d) $\frac{2}{5}$

(2) $\frac{2}{5} \div \frac{10}{4} =$

- (a) $\frac{2}{4}$ (b) $\frac{4}{25}$ (c) $\frac{5}{20}$ (d) $\frac{1}{10}$

(3) If 5 is $\frac{1}{7}$ of a number, then the number is

- (a) 5 (b) 7 (c) 35 (d) 40

(4) The next equivalent fractions in the pattern $\frac{3}{5}, \frac{6}{10}, \frac{\dots}{\dots}$ is

- (a) $\frac{1}{6}$ (b) $\frac{7}{15}$ (c) $\frac{9}{15}$ (d) $\frac{1}{5}$

(5) 100% is equivalent to

- (a) 100 (b) 10 (c) 0.1 (d) 1

(6) Which of the following points lies in the fourth quadrant?

- (a) (1, -4) (b) (-1, 4) (c) (-1, -4) (d) (1, 4)

(7) The least common denominator of $\frac{2}{9}$ and $\frac{1}{4}$ is

- (a) 24 (b) 36 (c) 16 (d) 18

(8) When the width of a cuboid is tripled, its volume will increase by

- (a) doubled (b) 3 times (c) 4 times (d) 6 times

(9) Which of the following represents the volume of a cuboid?



- (a) 28 cm (b) 28 cm^2 (c) 28 cm^3 (d) 22.8 cm

Second Question 2 Answer the Following questions:

- (1) A pet store has 35 dogs and 15 cats.

Write the required ratios in simplest form:

(a) The ratio of the number of dogs to the number of cats.

(b) The ratio of the number of cats to the total number of pets in the store.

- (2) A runner covered $\frac{3}{4}$ kilometer in 3 laps.

How many kilometers did he run in one lap?

- (3) Find the result:



(a) $4.2 \times 1.8 =$

(b) $\frac{9}{10} \div \frac{3}{5} =$

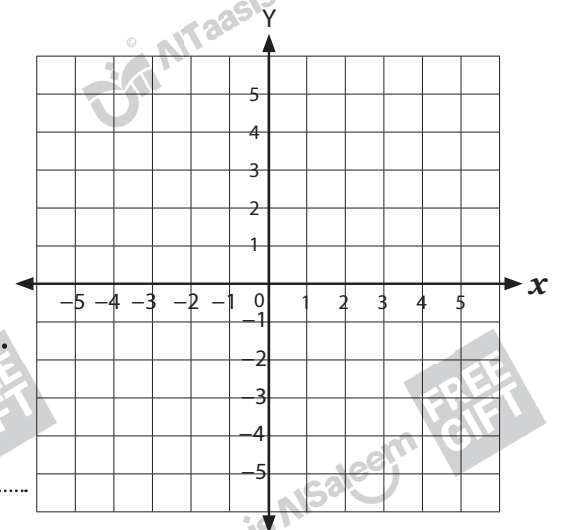
- (4) In the opposite coordinate grid:

(a) Plot the following points:

A (-2, 1), B (2, 0), C (2, -4), D (-2, -5)

(b) Connect the points to form a geometric shape.

Write the name of the shape.

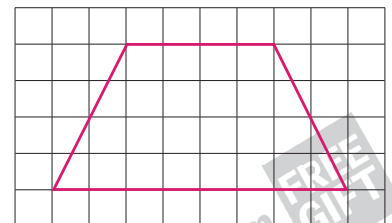


- (5) A cuboid has a base area of 200.5 m^2 and a height of 4 m.

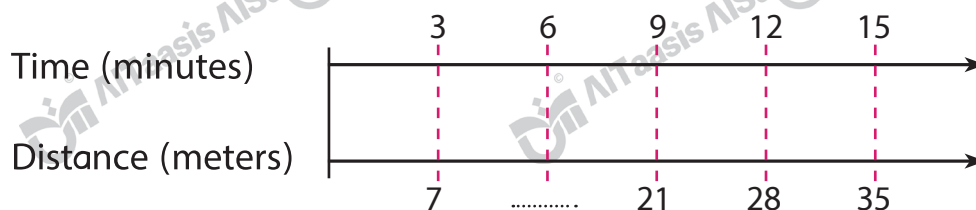


Calculate its volume.

- (6) Find the area of the opposite trapezium.



- (7) Find the missing number on the following double number line.



Mathematics

Exam 10

First Question 1 Choose the correct answer:

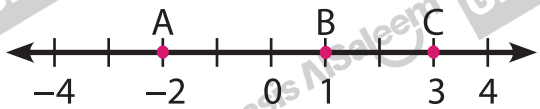
- (1) 50% $\frac{2}{5}$
 (a) $<$ (b) $>$ (c) $=$ (d) Otherwise
- (2) The reflection of the point $(-1.5, 2.5)$ across the x-axis is the point
 (a) $(-1.5, 2.5)$ (b) $(1.5, -2.5)$ (c) $(-1.5, -2.5)$ (d) $(1.5, 2.5)$
- (3) Which of the following is NOT a conversion factor?
 (a) $\frac{1 \text{ km}}{1000 \text{ m}}$ (b) $\frac{60 \text{ min}}{1 \text{ hour}}$ (c) $\frac{90 \text{ km}}{1 \text{ hour}}$ (d) $\frac{1 \text{ day}}{24 \text{ hours}}$
- (4) The ratio of the number of circles to the number of squares is
 (a) $2 : 3$ (b) $3 : 2$ (c) $3 : 5$ (d) $2 : 5$
- (5) $\frac{2}{9} \div 2 =$
 (a) $\frac{1}{6}$ (b) $\frac{1}{2}$ (c) $\frac{1}{18}$ (d) $\frac{1}{9}$
- (6) The ratio which is not equivalent to $\frac{2}{5}$ is
 (a) $\frac{4}{10}$ (b) $\frac{6}{15}$ (c) $\frac{4}{6}$ (d) $\frac{8}{20}$
- (7) If 18 % of a number equals 36, then the number is
 (a) 100 (b) 200 (c) 300 (d) 400
- (8) The distance between the point $(5, 3)$ and the y-axis is units.
 (a) 5 (b) 8 (c) 3 (d) 2
- (9) The area of a right-angled triangle =
 (a) $A = b \times h$ (b) $A = \frac{1}{2} \times b \times h$ (c) $A = 2 \times b \times h$ (d) $A = b + h$

Second Question 2 Answer the Following questions:

(1) Using the following number line:



- (a) The distance between A and C is
- (b) The distance between A and B is
- (c) The distance between B and C is

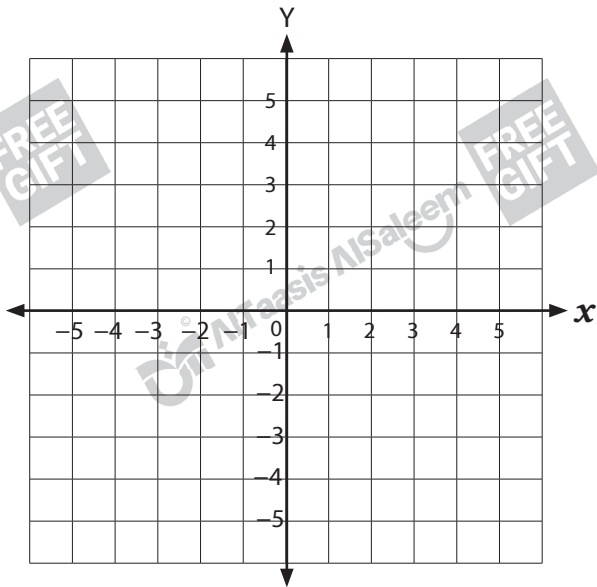


(2) Are the two ratios $\frac{9}{36}$ and $\frac{7}{28}$ equivalent?

Answer:

(3) Plot the following points on the coordinate plane:

- (a) A (1.5, 1.5) , B (− 1.5 , − 2)
C (3.5 , 0) , D (−1.5 , 2)



(b) Identify the points that are reflections of each other across the x-axis.

(4) Which is smaller in area:



Triangle (A), with a base length of 40 cm and a corresponding height of 20 cm
OR
triangle (B), with a base length of 38 cm and a corresponding height of 24 cm.
.....
.....

(5) Nagwa takes 13.5 minutes to make cookies. Calculate the time she takes in seconds.

.....

(6) The total dinner bill is 500 L.E., and there is a 10% tax.

Calculate the bill after adding the tax.

.....

(7) Complete the following:

- (a) The triangular prism has rectangular faces.
- (b) One fourth of 32 is

Model Answers**Exam (1)****First Question:**

- (1) c (2) d (3) c (4) b (5) a
 (6) b (7) b (8) c (9) b

Second Question:

- (1) 1.4 meters = 140 cm.
 (2) Volume = $6 \times 5 \times 4 = 120 \text{ cm}^3$.
 (3) $A = \frac{1}{2} \times 4 \times 3 = 6 \text{ cm}^2$. (4) $5 \times \frac{1}{8} = \frac{5}{8}$
 (5) Number of absent students = 50% of 500 = 250 students.
 (6) $6 : X = 12 : 20$, $X = \frac{20 \times 6}{12} = 10$
 (7) (a) Answer by yourself.
 (b) $|4 - (-3)| = |4 + 3| = 7$ units.

Exam (2)**First Question:**

- (1) a (2) b (3) a (4) b (5) b
 (6) c (7) a (8) a (9) c

Second Question:

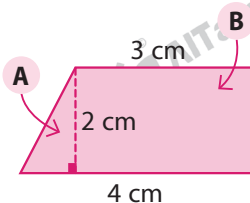
- (1) Apples : oranges = 1 : 3
 Number of oranges = 18 , Each part = $18 \div 3 = 6$
 Number of apples = $1 \times 6 = 6$
 (2) (a) $\frac{3}{5} \div 2 = \frac{3}{5} \times \frac{1}{2} = \frac{3}{10}$ (b) 12.96
 (3) Number of students = $\frac{60 \times 40}{100} = 24$ students.
 (4) Number of students $176 \div 8.8 = 20$ students.
 (5) The original size = $1 \times 2 \times 2.5 = 5 \text{ m}^3$.
 New length = 2 m.
 New volume = $2 \times 2 \times 2.5 = 10 \text{ m}^3$.
 (6) 40,000 mL = 40 L.
 (7) (a) Answer by yourself. (b) Yes. (c) Quadrilateral.

Exam (3)**First Question:**

- (1) a (2) b (3) b (4) d (5) d
 (6) c (7) c (8) a (9) b

Second Question:

- (1) Area of figure A = $\frac{1}{2} \times 2 \times 1 = 1 \text{ cm}^2$.
 Area of figure B = $3 \times 2 = 6 \text{ cm}^2$.
 Area of Trapezium = $1 + 6 = 7 \text{ cm}^2$.
 (2) $12.5 \times 60 = 750$ seconds.



(3) (a) $\frac{4}{9} < \frac{2}{3}$, (No) (b) $\frac{4}{9} \div \frac{2}{3} = \frac{4}{9} \times \frac{3}{2} = \frac{12}{18} = \frac{2}{3}$

(4) $A = \frac{1}{2} \times 20 \times 7 = 10 \times 7 = 70 \text{ cm}^2$.

(5) V (original) = $5 \times 4 \times 1.5 = 30 \text{ cm}^3$.

V (new) = $10 \times 8 \times 3 = 240 \text{ cm}^3$.

(6) 10% of 2500 = $\frac{10}{100} \times 2500 = 250 \text{ L.E.}$

(7) $720 \div 9 = 80$, $80 \times 5 = 400 \text{ L.E.}$

Exam (4)**First Question:**

- (1) a (2) c (3) b (4) b (5) a
 (6) a (7) b (8) b (9) a

Second Question:

(1) Area of two bases = $2 \times \frac{1}{2} \times 8 \times 6 = 48 \text{ cm}^2$

Lateral area = $(8 + 6 + 10) \times 3 = 72 \text{ cm}^2$

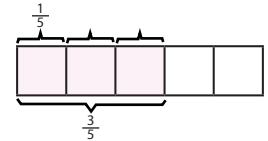
Total area = $48 + 72 = 120 \text{ cm}^2$

(2) Area = $6 \times 12 = 72 \text{ cm}^2$ (3) $\frac{30}{100} \times 300 = 90$ pounds

(4) (a) $\frac{60}{5} = 12$ m per min. (b) $\frac{3}{5} \times 10 = \frac{30}{5} = 6$

(5) $150 \times 8 = 1,200$ pieces of candy.

(6) $\frac{3}{5} \div 3 = \frac{1}{5}$ of a pizza.



(7) Answer by yourself.

Exam (5)**First Question:**

- (1) c (2) b (3) c (4) c (5) b
 (6) c (7) c (8) d (9) a

Second Question:

(1) Area of parallelogram = $18 \times 12 = 216 \text{ m}^2$.

Area of rhombus = $9 \times 8 = 72 \text{ m}^2$.

Remaining area = $216 - 72 = 144 \text{ m}^2$.

(2) (a) $n = \frac{6 \times 6}{12} = \frac{36}{12} = 3$

(b) $n = \frac{1}{16} \div \frac{5}{8} = \frac{1}{16} \times \frac{8}{5} = \frac{8}{80} = \frac{1}{10}$

(3) $360 \div 9 = 40$

(4) $A = 6 \times (6 \times 6) = 216 \text{ cm}^2$.

(5) $\frac{50}{80} \times 100\% = 62.5\%$

(6) $6 \div \frac{3}{4} = 6 \times \frac{4}{3} = 8$ bottles.

(7) (a) D (2, -3)

(b) AB = 6 units.

BC = 4 units.

Exam (6)

First Question:

- (1) d (2) d (3) d (4) c (5) c
(6) c (7) d (8) d (9) a

Second Question:

(1) (a) 0.5313 (b) $\frac{3}{15} \times \frac{5}{6} = \frac{1}{5} \times \frac{5}{6} = \frac{1}{6}$

(2) $\frac{40}{100} \times 250 = 100$

(3) $80 \div 2 = 40$ m.

(4) Boys : Girls

3 : 4

? : 24

Number of Boys = $\frac{24 \times 3}{4} = 18$ boys.

(5) Area of one face = $\frac{1}{2} \times 2 \times 5 = 5$ m².

Surface area = $(2 \times 2) + (4 \times 5) = 4 + 20 = 24$ m².

(6) Area = $10 \times 6 = 60$ cm². (7) A (-3,4), B (2,3), C (5,0), D (0,-4).

Exam (7)

First Question:

- (1) c (2) c (3) d (4) d (5) b
(6) b (7) a (8) d (9) b

Second Question:

(1) $A = \frac{1}{2} \times 8 \times 6 = 24$ cm²

(2) (a) $\frac{27}{100}$ (b) $\frac{9}{100}$

(3) $25 \times 3.5 = 87.5$ L.E.

(4) Total = $32 \div 0.8 = 40$ pieces

(5) $V = 5 \times 3 \times 2 = 30$ cm³

(6) unit rate = $450 \div 5 = 90$ km/hr

(7) The figure ABC is a triangle

Exam (8)

First Question:

- (1) b (2) a (3) b (4) a (5) c
(6) c (7) b (8) b (9) c

Second Question:

(1) $\frac{30}{100} \times 600 = 180$

(2) (a) price of 1 donut = $90 \div 3 = 30$

(b) price of 1 donut = $250 \div 5 = 50$

The best price is case (a).

(3) (SA) = $2 \times (l \times w + l \times h + w \times h)$

= $2 \times (10 \times 5 + 10 \times 3 + 5 \times 3)$

= $2 \times (50 + 30 + 15) = 2 \times 95 = 190$ cm².

(4) $y = \frac{5 \times 8}{2} = 20$ $x = \frac{10 \times 2}{5} = 4$
 $x + y = 20 + 4 = 24$

(5) $A = \frac{1}{2} \times b \times h$, $32 = (\frac{1}{2} \times h) \times b$
 $32 = 8 \times b$, $b = 4$ cm.

(6) Lili saved = $\frac{120}{2} = 60$ L.E. each day.

Mazen saved $\frac{180}{6} = 30$ L.E. each day.

Lili saved 300 in 5 days, Mazen saved 300 in 10 days.

Lili will buy first. (7) Answer by yourself.

Exam (9)

First Question:

- (1) c (2) b (3) c (4) c (5) d
(6) a (7) b (8) b (9) c

Second Question:

(1) (a) $35 : 15 = 7 : 3$ (b) $15 : 50 = 3 : 10$

(2) $\frac{3}{4} \div 3 = \frac{3}{4} \times \frac{1}{3} = \frac{1}{4}$ km.

(3) (a) 7.56 (b) $\frac{3}{2}$

(4) Trapezium.

(5) $V = \text{base area} \times h$, $V = 200.5 \times 4 = 802$ m³.

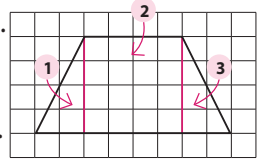
(6) A of figure (1) = $\frac{1}{2} \times 2 \times 4 = 4$ units.

A of figure (2) = $4 \times 4 = 16$ units.

A of figure (3) = $\frac{1}{2} \times 2 \times 4 = 4$ units.

Area of a trapezium = $4 + 16 + 4 = 24$ units.

(7) missing number is 14



Exam (10)

First Question:

- (1) b (2) c (3) c (4) a (5) d
(6) c (7) b (8) a (9) b

Second Question:

(1) (a) 5 (b) 3 (c) 2

(2) yes, $\frac{9}{36} = \frac{1}{4}$ and $\frac{7}{28} = \frac{1}{4}$

(3) (a) Answer by yourself. (b) B and D.

(4) A of triangle (A) = $\frac{1}{2} \times 40 \times 20 = 400$ cm².

A of triangle (B) = $\frac{1}{2} \times 38 \times 24 = 456$ cm².

Area of triangle A < area of triangle B.

(5) Time in seconds = $13.5 \times 60 = 810$ seconds.

(6) 10% of 500 = $\frac{10}{100} \times 500 = 50$ L.E.

The bill after tax = $500 + 50 = 550$ L.E.

(7) (a) 3 (b) 8

حمل الآن

مجانا وحصريا

امتحانات رقم (5)

الترم الثاني



Prim 6 - Model No

(1)

[Q1] [A] Choose the correct answer:

(1) Which ratio means the same thing as 1 : 4 ?

- a) 4 through 1 b) 1 to 1 c) $\frac{4}{1}$ d) 1 to 4

(2) The volume of cuboid of dimensions 12 cm., 9.5 cm., 10 cm..... is cm^3

- a) 114 b) 1140 c) 11.4 d) 1.14

(3) The percentage of the shaded part to whole figure = %



- a) 5 b) 0.5 c) 50 d) 10

[B] The total number of boys and girls in a school is 540 , if the number of boys in this school is 300 . Find The ratio between the number of boys and the number of girls?

[Q2] [A] Choose the correct answer:

(1) Which of the following is NOT a unit rate?

- a) 140 L. E .weekly b) 25 L.E. for each kg c) 0.2 kg of flour per cup cake d) 90km per 60 minutes

(2) If The reciprocal of $\frac{4}{9}$ is $\frac{m}{4}$ then $m + 1 = \dots\dots\dots$

- a) 9 b) 10 c) 3 d) 5

(3) If the side length of a rhombus is 10 cm and its height 3.4 cm, then it's area is Cm^2

- a) 3.04 b) 3.40 c) 34 d) 0.34

[B] In a mathematics exam ,Rihana got 38 marks of 40 marks. Find the percentage of the marks she got?

[Q3] [A] Choose the correct answer:

(1) To find value of D in equation $D \div \frac{5}{7} = \frac{1}{6}$, we use operation

- a) division b) Multiplication c) Addition d) subtraction

(2) A point is located 3 units to the right of the origin point and 2 units up, then the point is (.... ,)

- a) (3, - 2) b) (3, 2) c) (- 3, - 2) d) (- 3, 2)

(3) If $AB = 20$ units then $x =$



- a) 9.5 b) 20 c) 10 d) 10.5

[B] If the perimeter of one face in a cube is 60 mm ,then Find its surface area ?

[Q4]

[A] If you need to buy 1.5 kilograms of apples for your mother at a cost of 40.50 L.E. per kilogram, how much would you pay?

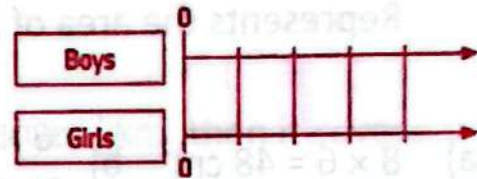
- [B] If the ratio between two numbers is $2 : 3$ and the first number is 6, then find the second number ?

[Q5]

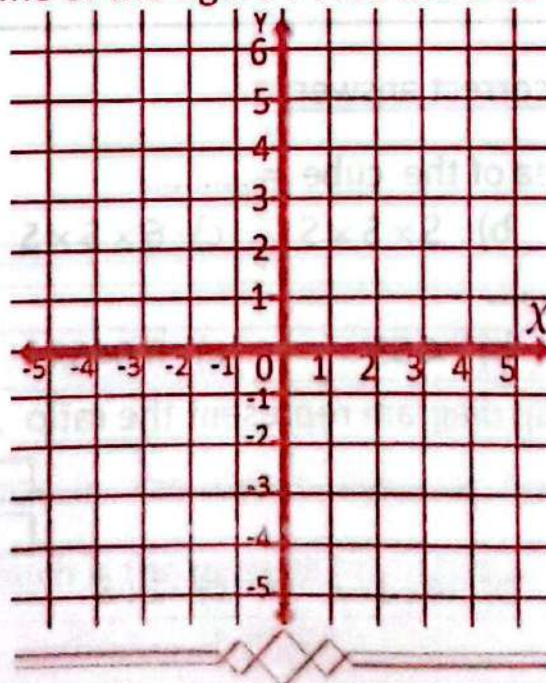
- [A] From opposite double number line:

If the ratio between the numbers of boys to girls is $5 : 6$

and the total of boys and girls is 44 pupils, then Find the number of girls ?



- [B] Locate the following points on the coordinate plane and connect the points in order A (6, 1), B (6 , 4), C (- 2 , 1), What is the name of the figure ? Find the area of the figure ?



End of the questions

Prim 6 - Model No

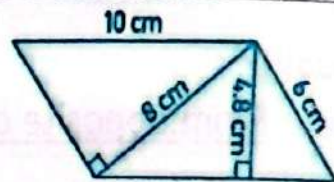
(2)

[Q1] [A] Choose the correct answer:

(1) If the price of a shirt is 280 L.E. before discount 10 % then the discount isL.E.

- a) 2.8 b) 28 c) 252 d) 270

(2) Which of the following equations
Represents the area of parallelogram ?



- a) $8 \times 6 = 48 \text{ cm}^2$ b) $6 \times 4.8 = 28.8 \text{ cm}^2$ c) $8 \times 4.8 = 38.4 \text{ cm}^2$ d) $8 \times 10 = 80 \text{ cm}^2$

(3) The point Lies in the first quadrant

- a) (2,-3) b) (-1,-4) c) (-4, 3) d) (3, 5)

[B] If 437.5 L.E. is distributed among the excellent pupils and each of them takes 175 L.E. Find the number of excellent pupils?

[Q2] [A] Choose the correct answer:

(1) The surface area of the cube =

- a) S^2 b) $S \times S \times S$ c) $6 \times S \times S$ d) $S + S + S$

(2) $0.453 \times 0.1 = \dots\dots\dots$

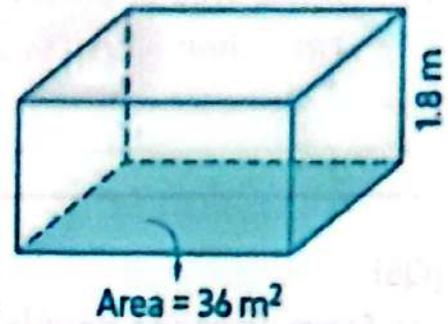
- a) 0.0543 b) 4.53 c) 0.0453 d) 0.453

(3) The opposite tap diagram represent the ratio



- a) 3 : 4 b) 4 : 3 c) 1 : 3 d) 3 : 5

[B] Find the volume of the opposite cuboid ?.



[Q3] [A] Choose the correct answer:

(1) A car consumes 0.1 liter of petrol to cover 1 km ,then it covers ... km/liter

- a) 1 b) 5 c) 10 d) 20

(2) $1 - 35\% = \dots\dots$

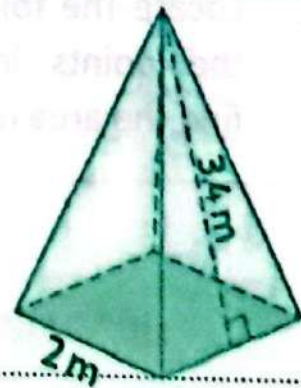
- a) 65 b) 6.5 c) 0.65 d) 34

(3) $60 \text{ m / min} = \dots\dots\dots \text{ m / sec}$

- a) 1 b) 60 c) 3600 d) 120

[B] In the opposite figure :

Find the area of the square – based pyramid?



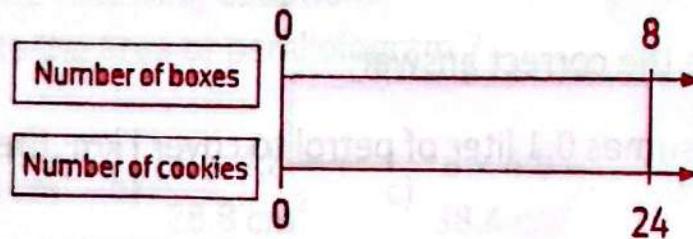
[Q4]

[A] Each stone block in the Great Pyramid has a mass of about 2,300 kg. How much is the mass of one block in grams?

- [B] If the area of parallelogram with area 4.6 cm^2 . And base length 0.6 cm . , then Find its corresponding height ?

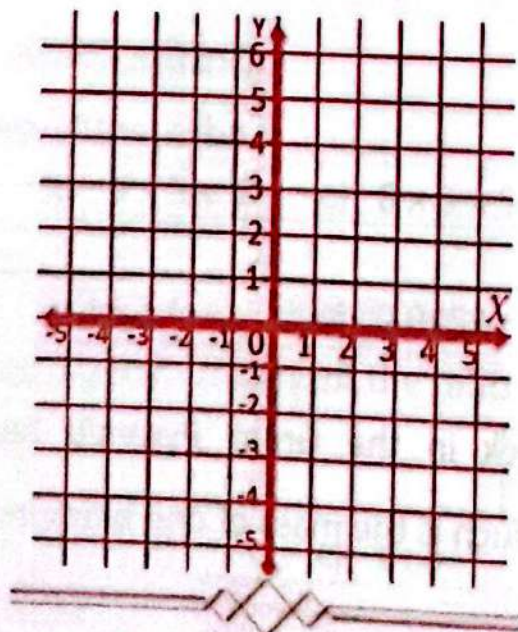
[Q5]

[A] From opposite double number line:



There are 24 cookies in 8 boxes,
then Find the number of cookies in 3 boxes ?

- [B] Locate the following points on the coordinate plane and connect the points in order A (1, 1), B (1 , 5), C (4, 5), find the area of triangle ABC ?



End of the questions

Prim 6 - Model No

(3)

[Q1] [A] Choose the correct answer:

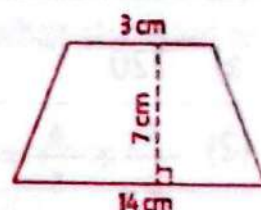
(1) The point Lies in the first quadrant

- a) (2,-3) b) (-1,-4) c) (-4, 3) d) (3, 5)

(2) If $24 \times 96 = 2,304$ then $2,304 \div 9.6 = \dots\dots\dots$

- a) 24 b) 2.4 c) 0.24 d) 240

(3) The surface area of opposite trapezium =



- a) 56 b) 77 c) 98 d) 38.5

[B] From the opposite table

whole	part	percent
x	54	20%

Find the value of x ?

[Q2] [A] Choose the correct answer:

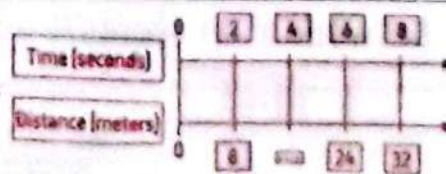
(1) The height of a rhombus is 5 cm. , and its area 35 cm^2 . Its perimeter....

- a) 7 b) 14 c) 28 d) 70

(2) A point is located 5 units to the right of the origin point and 2 units up, then the point is

- a) (-5, 2) b) (5, -2) c) (-5, -2) d) (5, 2)

(3) The opposite double number line represent the missing number is



- a) 8 b) 12 c) 16 d) 18

- [B] If number of pupils in a school 700 . One day 10 % of them were absent find the number of the present pupils that day?

[Q3] [A] Choose the correct answer:

(1) A car covered 240 km in 3 hours, then its speed = Km / hour

- a) 720 b) 72 c) 80 d) 8

(2) $\frac{4}{5} \div \frac{4}{5} = \frac{4}{5} \times \dots\dots\dots$

- a) $\frac{4}{5}$ b) $\frac{5}{4}$ c) 1 d) 1 %

(3) If $a : b = 1 : 4$, $b = 24$, then $a = \dots\dots\dots$

- a) 5 b) 10 c) 15 d) 20

[B] Find The area of the opposite triangle ?



[Q4]

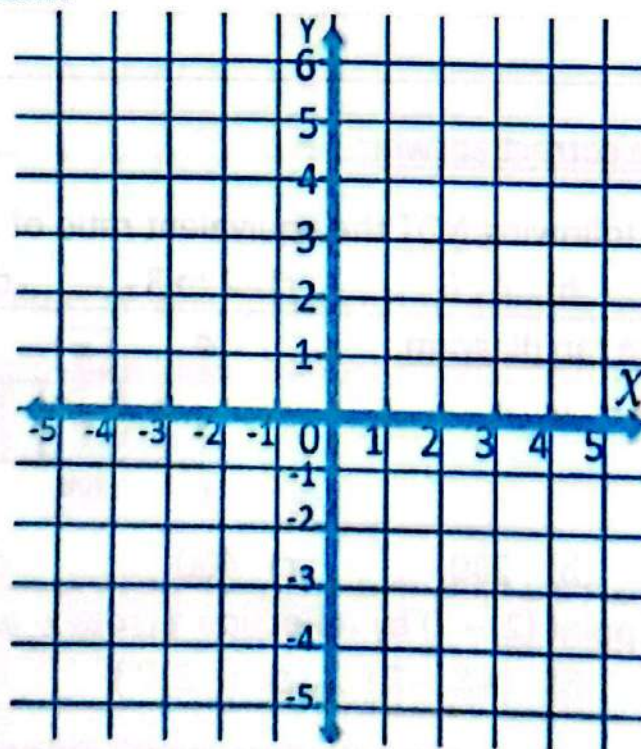
[A] In a math's exam, Salma got 95% and Rahma got 45 marks out of 50 which of them has got a better score. What is the difference between their scores?

- [B] If the perimeter of an equilateral triangle is 60 cm. and its height 5 cm. find its area?

[Q5]

- [A] If Soad bought 2 kg of orange for 30 L.E., then Find what she paid to buy 6 kg ?

- [B] graph the following points on the coordinate plane and connect the points in order A (1 , 4), B (1 , - 3), then find the distance between them?



End of the questions

Prim 6 - Model No**(4)****[Q1] [A] Choose the correct answer:**

(1) The reciprocal of 5 is

- a) 5 b) -5 c) $\frac{1}{5}$ d) $-\frac{1}{5}$

(2) 20 % of 600 =

- a) 1200 b) 120 c) 12 d) 0.12

(3) If The point (2 , 5) is moved 2 units to the right and 4 units down then the point A will be (.... ,)

- a) (4 , 9) b) (4 , 1) c) (0 , 9) d) (2 , 1)

[B] If There are 80 students in the class, 20% of the students of them wearing black.. How many students are wearing black ?

.....

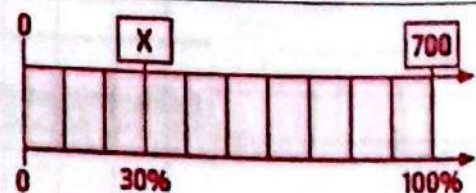
.....

[Q2] [A] Choose the correct answer:(1) Which of the following NOT the equivalent ratio of 16 : 24 =

- a) 8 : 12 b) 4 : 6 c) 2 to 3 d) 3 : 2

(2) From opposite tap diagram:

The value of x =



- a) 60 b) 240 c) 400 d) 600

(3) The image of point (2, - 7) by reflection across x- axis is

- a) (2 , -7) b) (-2 , -7) c) (-2 , 7) d) (2 , 7)

[B] If The area of parallelogram with base length 6.8 cm. and its corresponding height is 7 cm. ?

.....

.....

[Q3] [A] Choose the correct answer:

(1) Which of the following is NOT a unit rate ?

- a) 90 km per 60 minutes b) 140 L.E. weekly c) 1 kg of flour per a cake d) 25 L.E per each kg

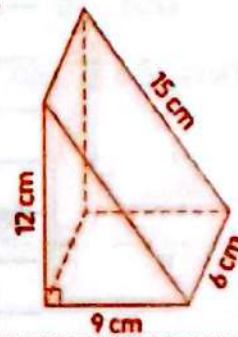
(2) The volume of cuboid whose dimensions 2 , 3 , cm. is 24 Cm^3

- a) 2 b) 144 c) 12 d) 4

(3) $5 \div \frac{2}{3} = \dots\dots\dots$

- a) 15 b) $\frac{10}{3}$ c) $7\frac{1}{2}$ d) $\frac{2}{15}$

[B] Find The surface area of opposite triangular prism ?



[Q4]

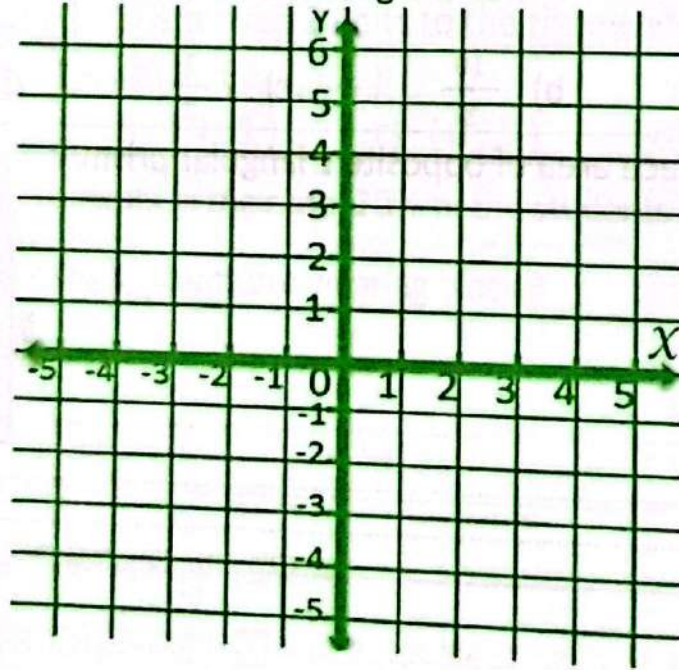
[A] Lana has 6 liters of milk. She needs to divide it into small bottles of $\frac{3}{4}$ liters each. How many bottles will she need ?

[B] A merchant sold 50kg of apple with 4550 L.E Find the price of a kilogram of apple?

[Q5]

[A] Find the volume of a cuboid if its dimensions 10 cm., 3.6 cm, 4 cm.
?

[B] Locate the following points on the coordinate plane and connect the points in order A (3 , 3) , B (3 , 0) , O is origin point then find the distance of AB ? area of triangle OAB ?



End of the questions

م / أحمد حسود

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Prim 6 - Model No**(5)****[Q1] [A] Choose the correct answer:**

(1) The Conversion factor for convert km to m is

- a) Km / hour b) Km / m c) $\frac{1000 \text{ km}}{60 \text{ sec}}$ d) 1000

(2) The point (0 , 3) lies on axis

- a) X b) Y c) O d) XY plane

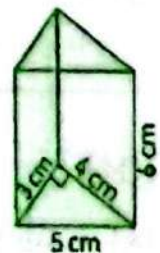
(3) The cuboid of dimensions are equal and each is 10 cm. then its volume is....

- a) 600 b) 1000 c) 10 d) 100

[B] If the ratio between what Ali has to what Mona has 3 : 5 ,and
Mona has 100 pounds then Find what Ali has ?

[Q2] [A] Choose the correct answer:(1) The reciprocal of $\frac{2}{5}$ is

- a) 2 b) $-\frac{5}{2}$ c) $\frac{5}{2}$ d) $-\frac{2}{5}$

(2) The area triangular pyramid is Cm^2 

- a) 72 b) 42 c) 84 d) 60

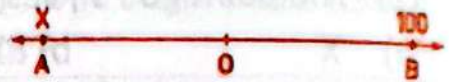
(3) 65 % of 44 44 % of 65

- a) < b) > c) = d) Otherwise

[B] If $\frac{x}{4} = 25\%$ then Find the value of x ?

[Q3] [A] Choose the correct answer:

(1) If the distance between A and B is 200, then x =

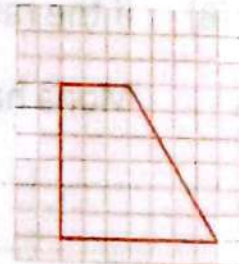


- a) 2 b) 8 c) 5 d) 3

(2) 0.8×0.7 8×0.07

- a) > b) < c) = d) Other wise

(3) The area of opposite trapezoid is..... square unit



- a) $28 - 6$ b) $28 + 6$ c) $16 + 12$ d) $16 - 12$

[B] From the opposite proportion table

kg	1	2	3	4
L.E.				200

Find the missing numbers?

[Q4]

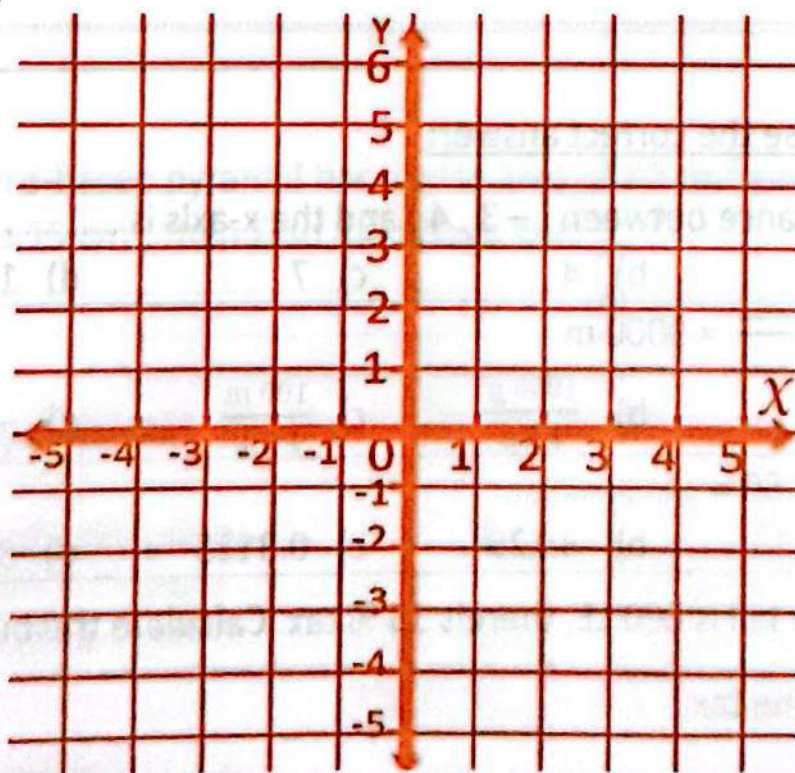
[A] Ali bought a TV set with 10 % discount from its price 25000, then find what did Ali pay ?

- [B] Which is greater: the area of a triangle whose base is 12 cm and its corresponding height 8 cm, or the area of a parallelogram whose base is 8 cm and its corresponding height 4 cm

[Q5]

- [A] Bilal cuts a piece of wood of length 20 m into equal parts of $\frac{1}{5}$ m long, How many pieces of wood parts ?

- [B] Locate the following points on the coordinate plane and connect the points in order A (3 , 3), B (3 , 0), C (3 , 6), then find the distance of AC ?



End of the questions

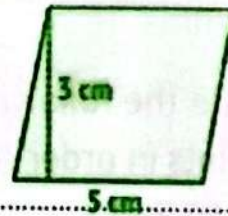
Prim 6 - Model No

(6)

[Q1] [A] Choose the correct answer:

- (1) The image of the point $(5, 5)$ by reflection on X-axis is
- a) $(0, 5)$ b) $(-5, 5)$ c) $(5, -5)$ d) $(-5, -5)$
- (2) Which of the following isn't equivalent ratio to $3 : 4$?
- a) 75 % b) $\frac{6}{8}$ c) 0.75 d) $\frac{5}{4}$
- (3) Which of the following is the lowest cost in buying?
- a) 80 LE per 2 meters b) 50 LE per a meters c) 55 LE per a meters d) 100 LE per 3 meters

[B] Find the area of the opposite parallelogram?



[Q2] [A] Choose the correct answer:

- (1) The distance between $(-3, 4)$ and the x-axis is units
- a) 3 b) 4 c) 7 d) 1
- (2) $9 \text{ Km} \times \frac{\text{.....}}{\text{.....}} = 9000 \text{ m}$
- a) $\frac{1000 \text{ m}}{1 \text{ Km}}$ b) $\frac{1000 \text{ g}}{1 \text{ Kg}}$ c) $\frac{100 \text{ m}}{1 \text{ Km}}$ d) $\frac{1 \text{ km}}{1000 \text{ m}}$
- (3) $12.5 \times 2.50 = \text{.....}$
- a) 31.25 b) 3.125 c) 0.3125 d) 3125

[B] A dinner bill is 600 LE, there's 15 % tax. Calculate the bill after adding the tax.

.....

.....

[Q3] [A] Choose the correct answer:

(1) If a cube has an edge of 5 cm in length, then its surface area is cm^2

- a) 25 b) 125 c) 150 d) 100

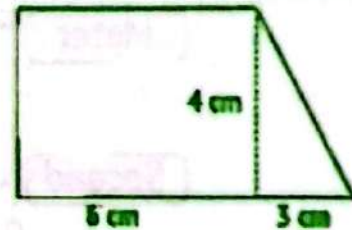
(2) $3.2 : 0.4$ $32 : 4$

- a) b) c) d)

(3) The number of heights of the right-angled triangle is

- a) 1 b) 2 c) 3 d) 5

[B] Find The area of the opposite trapezium ?



[Q4]

[A] If a square-based pyramid has a base area of 40 cm^2 and the area of its side is 15 cm^2 , then Find its surface area ?

[B] In the following table:

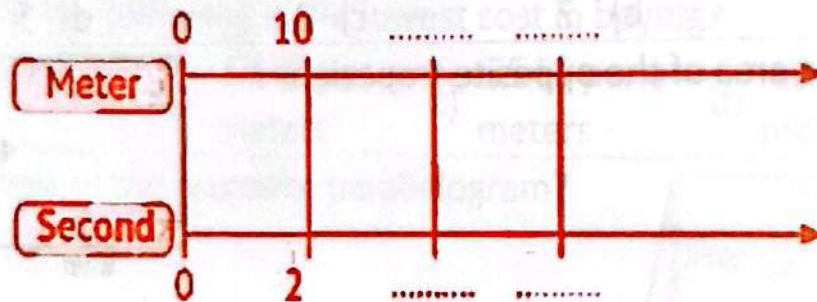
No. of Cake pieces	4	16
No. of Kg of Flour	0.5	X

How many kilograms of flour are needed to make 16 pieces of cake

[Q5]

- [A] A car travels at a speed of 90 km / hr. Find the distance travelled in two and a half hours ?
-
-

- [B] By using the following double line:



- 👉 Calculate the unit rate, and then find the number of meters covered in 5 second.
-
-

End of the questions

م/أحمد حسود

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Prim 6 - Model No**(7)****[Q1] [A] Choose the correct answer:**

(1) The distance between 4 and - 4 on the number line equals
units

- a) 0 b) 4 c) 8 d) 16

(2) 50 % of 360 equals

- a) 50 b) 100 c) 180 d) 360

(3) Which of the following describes the relation $\frac{1}{2}$ of $\frac{1}{4}$ km?

- a) $\frac{1}{2} \times \frac{1}{4}$ b) $\frac{1}{2} \div \frac{1}{4}$ c) $\frac{1}{2} \div \frac{1}{2}$ d) $\frac{1}{2} + \frac{1}{4}$

[B] If a cube has an edge of 7 cm, Find its surface area ?

[Q2] [A] Choose the correct answer:

(1) $1.2 \times 1.2 = \dots\dots$

- a) 144 b) 14.4 c) 1.44 d) 0.144

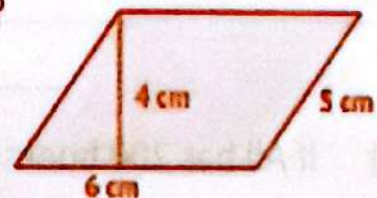
(2) The image of reflection of (0 , 5) on the X-axis is

- a) (5 , 5) b) (0 , - 5) c) (5 , 0) d) (- 5 , 0)

(3) If a square has a side length of 5 cm and its perimeter is 20 cm,
then the ratio between its side and its perimeter is :

- a) 1 : 4 b) 1 : 5 c) 5 : 1 d) 4 : 1

[B] Find the area of the opposite parallelogram?



[Q3] [A] Choose the correct answer:

(1) If the reciprocal of $\frac{2}{7}$ is $3\frac{x}{2}$, then $x = \dots\dots\dots$

- a) 7 b) 1 c) 3 d) 2

(2) All the following represents the rate of 4 factories of ceramic. The highest production rate is

- a) 200 cartons per hour b) 480 cartons per hour c) 300 cartons per hour d) 760 cartons per hour

(3) If the dimensions of a cuboid are 1.2 cm, 10 cm and 5 cm, then its volume is cm^3

- a) 60 b) 120 c) 600 d) 16.5

[B] Nehal distributed 0.25 Kg into bags. If the mass of each bag is 0.01 kg. How many bags are needed?

[Q4]

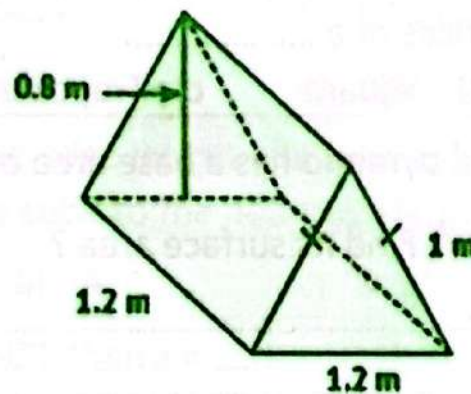
[A] Find The area of triangle whose base is 8 cm and its corresponding height is 6 cm ?

[B] If Ali has 200 books and 160 pens, then Find the ratio between the number of books and the number of pens ? (in the simplest form)

[Q5]

[A] If the area of triangle 24 cm^2 , its base length is 8 cm , Find its corresponding height ?

[B] Find the area of the opposite triangular prism:



End of the questions

Prim 6 - Model No**(8)****[Q1] [A] Choose the correct answer:**

(1) 60 % of is 72

- a) 43.2 b) 1200 c) 432 d) 120

(2) $5 \div \frac{5}{3}$ $5 \times \frac{4}{5}$

- a) > b) = c) < d) Other wise

(3) The ordered pairs (0, 0), (0, -2), (-2, -2) and (-2, 0) represent the vertices of a

- a) Triangle b) Square c) Trapezium d) Rectangle

[B] If the square based pyramid has a base area of 80 cm^2 and the area of its sides is 30 cm^2 , Find its surface area ?

.....

.....

[Q2] [A] Choose the correct answer:(1) Which of the following is an equivalent operation to $\frac{2}{3} \div \frac{1}{6}$?

- a) $4 + \frac{2}{3}$ b) $\frac{2}{3}$ c) $\frac{2}{3} \times 6$ d) $4 \times \frac{1}{4}$

(2) All the following ordered pairs lie in the 2nd quadrant, except.....

- a) (-7, 5) b) (2, -2) c) (-1, 5) d) (-2, 2)

(3) The volume of cuboid whose dimensions 3, 4, cm. is 60 Cm^3

- a) 12 b) 5 c) 60 d) 240

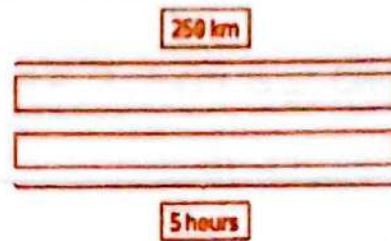
[B] A merchant sold 60 kg of orange with 2220 L.E Find the price of a kilogram of orange?

.....

.....

[Q3] [A] Choose the correct answer:

(1) The unit of the rate of the opposite diagram is



- a) 250 km per 5 hours b) 50 km per hour
c) 55 km per 2 hours d) 100 km per 2 hours

(2) If we doubled the edge length of a cube then The ratio between the volumes of a cube to the new cube is 1 :

- a) 2 b) 4 c) 8 d) 27

(3) If 10 % of X = 1500 then x =

- a) 15 b) 150 c) 1500 d) 1.5

[B] Find the volume of a cuboid if its dimensions 5 cm., 4.8 cm, 2 cm. ?

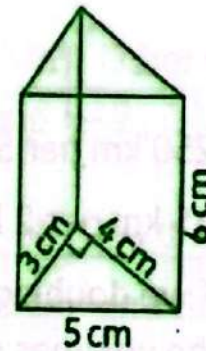
[Q4]

[A] If $\frac{x}{8} = 12.5\%$ then Find the value of X ?

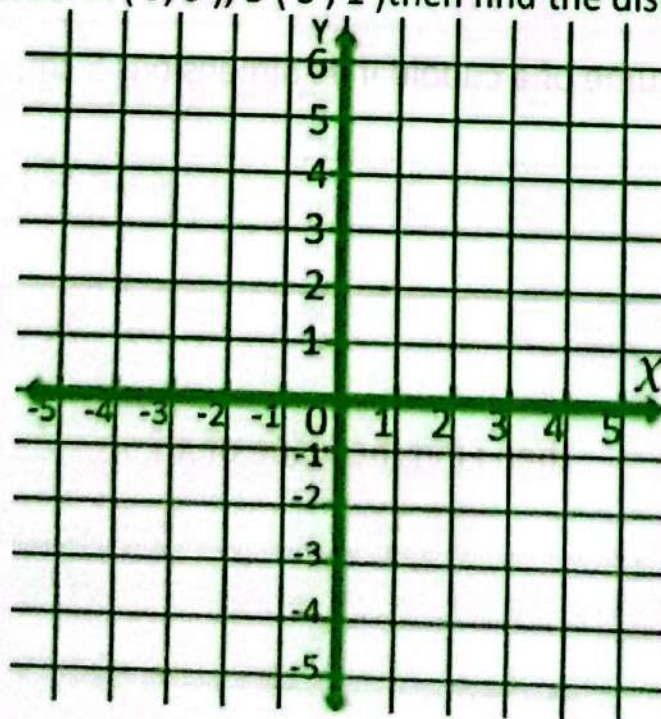
- [B] If Omar bought a TV set with 10 % discount from its price 34000, find what did Omar pay ?

[Q5]

- [A] Find the area triangular pyramid ?



- [B] Locate the following points on the coordinate plane and connect the points in order A (5, 5), B (5, 1) then find the distance of AB ?



End of the questions

Prim 6 - Model No

(9)

[Q1] [A] Choose the correct answer:(1) The volume of cuboid whose dimensions 4 , 3 , 5 cm. is Cm^3

- a) 47 b) 60 c) 72 d) 12

(2) $\frac{2}{5} \div \frac{1}{5} = \dots\dots\dots$

- a) 2 b) $\frac{2}{25}$ c) $\frac{2}{5}$ d) 5

(3) $12 : 20 = \dots\dots\dots$ (in the simplest form)

- a) 3 : 2 b) 5 : 7 c) 5 : 3 d) 3 : 5

[B] A merchant sold 50 kg of apple with 1550 L.E Find the price of a kilogram of apple ?[Q2] [A] Choose the correct answer:(1) The image of the point $(-3, 3)$ by reflection on X axis is

- a) $(-3, 3)$ b) $(3, 3)$ c) $(3, -3)$ d) $(-3, 0)$

(2) The triangle has altitudes

- a) 0 b) 1 c) 2 d) 3

(3) is the ratio between two different quantities

- a) Ratio b) Rate c) Proportion d) equivalent

[B] find the volume of a cuboid if its dimensions 10 cm. , 6 cm, 8 cm. ?

[Q3] [A] Choose the correct answer:

(1) The point (3 , 0) lies on axis

- a) X b) Y c) O d) XY plane

(2) $\frac{4}{5} = \dots\dots\dots\%$

- a) 20 b) 80 c) 75 d) 0.8

(3) If the quadrilateral pyramid area base 60 cm^2 . the area of one face is 30 cm^2 . then area of total area is Cm^2

- a) 90 b) 180 c) 120 d) 150

[B] Find the area of triangle whose length base 8 cm. and its corresponding height 6 cm. ?

[Q4]

[A] From the opposite proportion table

The price	75	?
month	3	2

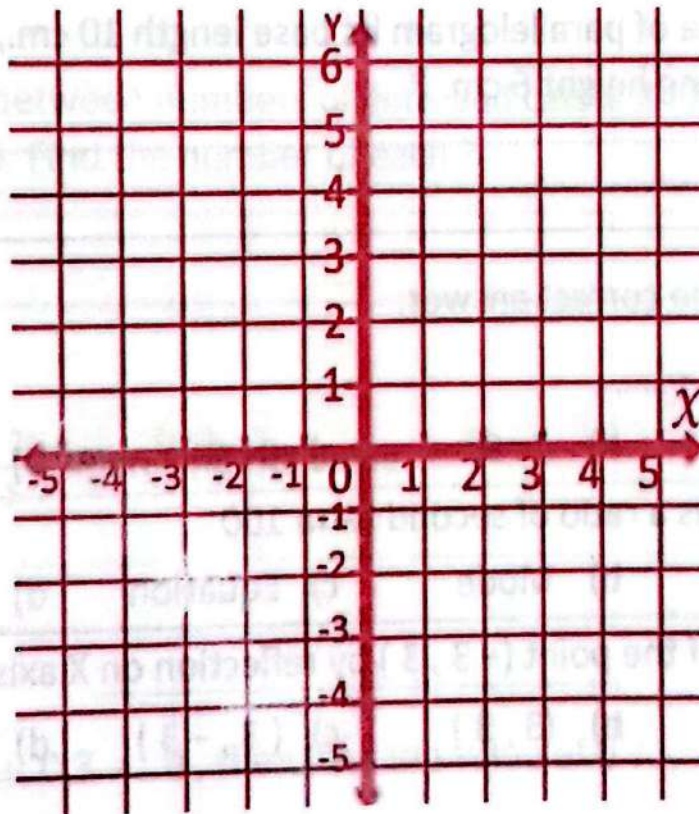
Find the saved money during two months

[B] If the cube of edge length 1 cm. then Find its lateral surface area ?

[Q5]

- [A] If Mahmoud bought a computer with 10 % discount from its price 15000, then find what Mahmoud paid ?

- [B] Locate the following points on the coordinate plane and connect the points in order A (3, 3), B (3 , - 2), C (- 2 , - 2), determine the coordinate of D which make the figure square ?



End of the questions

Prim 6 - Model No

10

[Q1] [A] Choose the correct answer:

(1) $0.37 \times 0.1 = \dots\dots$

- a) 3.7 b) 37.0 c) 0.370 d) 0.037

(2) Ayman read 45 pages in 15 days, then the rate of his performance
= $\dots\dots\dots$ pages / day

- a) 8 b) 12 c) 3 d) 20

(3) The distance between $(-3, -10)$, $(-3, 4)$ is Unit

- a) 4 b) 14 c) 6 d) 10

[B] Find the area of parallelogram its base length 10 cm., its
corresponding height 6 cm. ?

.....

.....

[Q2] [A] Choose the correct answer:

(1) $27 : 45 = \dots\dots : \dots\dots$

- a) 3 : 5 b) 3 : 9 c) 9 : 8 d) 5 : 3

(2) $\dots\dots\dots$ is a ratio of second term 100

- a) Rate b) Mode c) Equation d) percentage

(3) The image of the point $(-3, 3)$ by reflection on X axis is $\dots\dots\dots$

- a) $(-3, 3)$ b) $(3, 3)$ c) $(3, -3)$ d) $(-3, 0)$

[B] Find the area of quadrilateral pyramid whose edge length 4 m. ?

.....

.....

[Q3] [A] Choose the correct answer:

(1) When we plot the ordered pair (4 , 3) in the coordinate plane we move Horizontal units on X-axis

- a) 4 b) 3 c) 7 d) 12

(2) The two lines never intersecting

- a) Parallel b) Intersecting c) Perpendicular d) coincides

(3) Area of parallelogram = × corresponding height

- a) Base b) Triangle c) Half base d) edge

[B] The ratio between numbers of lions and cats is 2 : 7 and the sum of them is 45. Find the number of each ?

[Q4]

[A] If $\frac{4}{x+1} = \frac{2}{5}$, then Find the value x ?

[B] If $0.024 \div 0.3 = b$, then Find the value of b ?

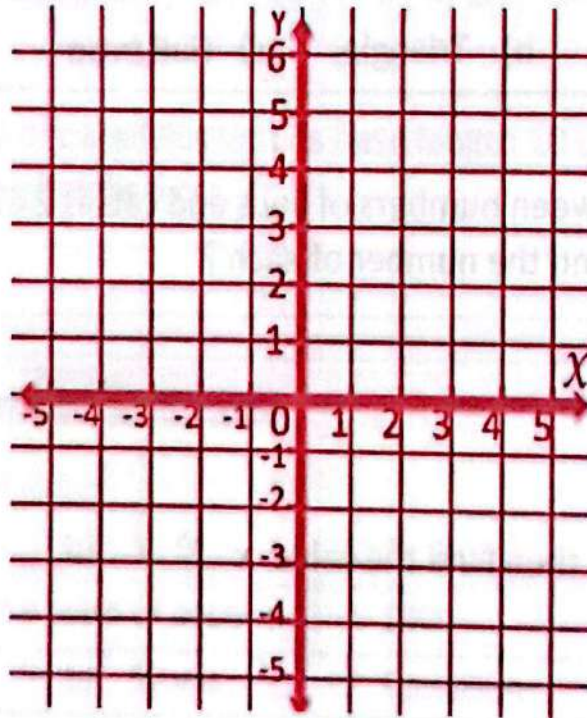
[Q5]

- [A] A man bought a TV. set. He was given a 15% discount of its marked price which was 8,500 L.E. Find its price after discount.?

- [B] Plot the points on the coordinate plane:

$A(1,-1), B(1,3), C(-3,-3), D(-3,-1),$

↳ What is the name of the figure ABCD?



End of the questions

م/ أحمد مسعود

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Prim 6 - Model No**11)****[Q1] [A] Choose the correct answer:**

(1) $13.31 \div 0.11 = \dots \div 11$

- a) 1,331 b) 1.331 c) 133.1 d) 0.1331

(2) $\frac{1\text{km}}{\dots}$ is a conversion factor

- a) 2 hours b) 100 cm c) 1,000 m d) 1,000 km

(3) The area of parallelogram =

- a) $b + h$ b) $b \times h$ c) $(b + h) \times 2$ d) $\frac{b}{h}$

[B] If the ratio between two numbers is 3: 5 and the smaller one is 15, then find the greater one ?

.....

.....

[Q2] [A] Choose the correct answer:

(1) $\dots \div \frac{3}{5} = \frac{3}{2}$

- a) $\frac{2}{5}$ b) $\frac{5}{2}$ c) $\frac{6}{10}$ d) $\frac{9}{10}$

(2) In the opposite figure :

BC : AE =

- a) 2 : 5 b) 1 : 3 c) 1 : 4 d) 4 : 1

(3) If we double the edge length of a cube then The ratio between the volumes of a cube to the new cube is 1 :

- a) 8 b) 3 c) 2 d) 4

[B] Find the volume of the cuboid of area base 28 cm^2 , and its height 7.4 cm.?

.....

.....

[Q3] [A] Choose the correct answer:

(1) The next ratio of $2 : 5$, $6 : 15$, $18 : 45$,

- a) $54 : 135$ b) $54 : 90$ c) $36 : 90$ d) $54 : 180$

(2) 3.25×0.12 32.5×0.012

- a) $>$ b) $<$ c) $=$ d) otherwise

(3) In the opposite figure :



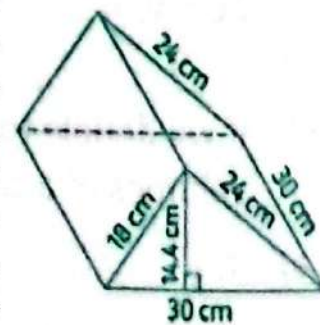
If the distance between A and B is 200 then $x =$

- a) 100 b) -100 c) 200 d) -200

[B] In a Maths exam, Yasser got 80% and Fayez got 45 marks out of 50 which of them has got a better score. What is the difference between their scores?

[Q4]

[A] Calculate the surface area of the opposite triangular prism.

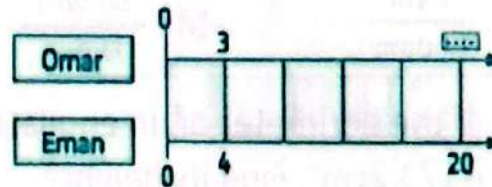


- [B] In the opposite figure :
Find the area of the opposite figure ?.

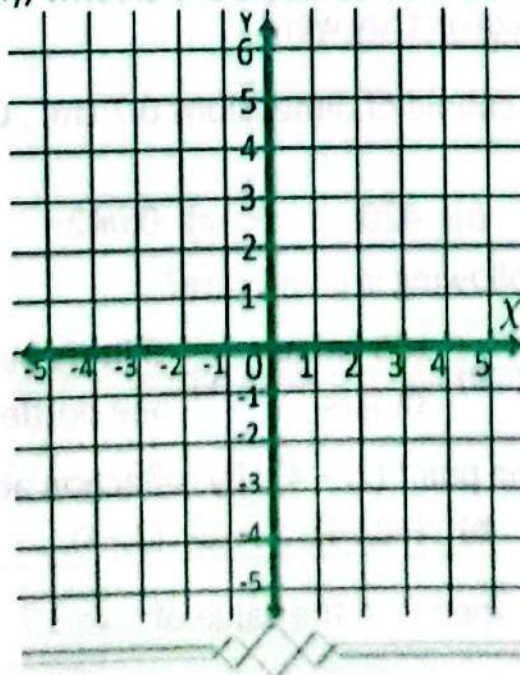


[Q5]

- [A] From the opposite double number line , if the ratio between Omar saved and Salma saved was 3 : 4 if Salma saved 20 L.E. then Omar saved L.E.



- [B] Plot A(1,-3), B(1,4), what is the distance between A and B ?



End of the questions

Prim 6 - Model No

12)

[Q1] [A] Choose the correct answer:

(1) If $B\% + 40\% + 40\% = 1$, then the value of B =

a) 20

b) 100

c) 40 %

d) 20 %

(2) The point (2 , - 3) lies in quadrant

a) First

b) Second

c) Third

d) fourth

(3) Which of the following is NOT a conversion factor ?

a) $\frac{1 \text{ km}}{1,000 \text{ m}}$ b) $\frac{60 \text{ min}}{1 \text{ hour}}$ c) $\frac{90 \text{ km}}{\text{hour}}$ d) $\frac{1 \text{ day}}{24 \text{ hours}}$ [B] If the perimeter of an equilateral triangle e is 60 cm and its area is 173.2 cm^2 , Find its height?

[Q2] [A] Choose the correct answer:

(1) The volume of cuboid of dimensions 0.7 cm. , 0.6 cm. , 10 cm. is Cm^3 .

a) 42

b) 420

c) 0.042

d) 4.2

(2) Which of the following is a unit rate?

a) 20 L.E. per 2 kg

b) 105 km per 3 hours

c) 3 liters per one bottle

d) 8 spoons of square for 4 cups of tea

(3) The image of the point (2, - 4) by reflection across x-axis is

a) (2, 4)

b) (-2, -4)

c) (2, -4)

d) (-2, 4)

[B] If $\frac{8}{9} \div \frac{4}{3} = \frac{x}{3}$ then Find the value of : $x + 3$?

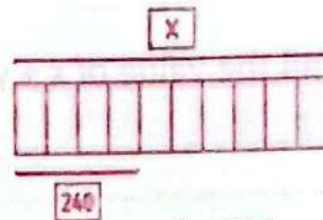
[Q3] [A] Choose the correct answer:

(1) The area of triangle of base length 10 cm. and its corresponding height 4.8 is cm^2

- a) 48 b) 24 c) 4.8 d) 2.4

(2) From the opposite tape diagram

$X = \dots\dots\dots$



- a) 60 b) 240 c) 400 d) 600

(3) You can use the opposite model to solve the problem

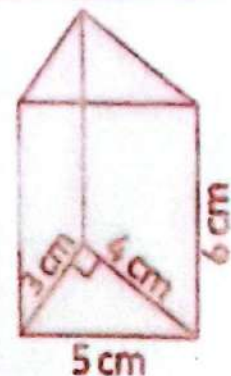


- a) $\frac{1}{10} \div \frac{1}{2}$ b) $\frac{1}{10} \div 5$ c) $\frac{1}{2} \div 5$ d) $\frac{1}{2} \div 10$

[B] if the ratio 7 : 11 is equivalent to the ratio $x : 7.7$ then Find the value of x ?

[Q4]

[A] Find The surface area of the opposite triangular prism ?



[B] If 20% of the students in a class are wearing black. There are 40 students in the class. How many students are wearing black?

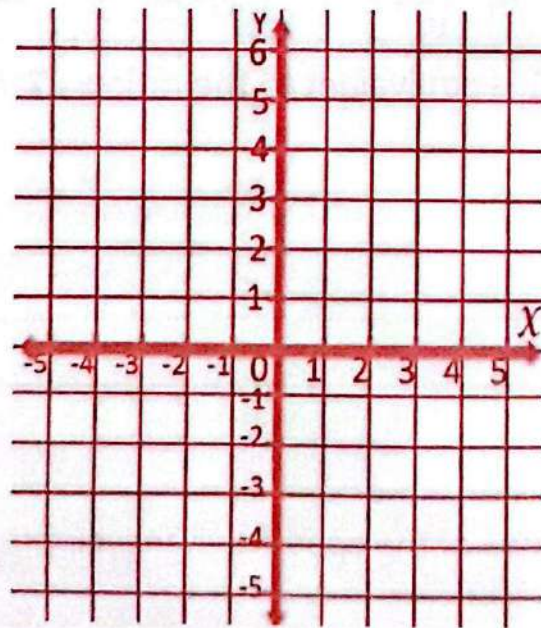
[Q5]

[A] In the opposite ratio table?

Kg	1	2	3	4
L.E.	x	100	y	200

Find the value of $x + y$?

[B] Locate the following points on the coordinate plane and connect the points in order A (6, 1), B (6 , 4), C (- 2 , 4), determine the coordinate of D which make the figure rectangle ? what its area?



End of the questions

م/أحمد حسود

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كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

